

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Mission Dates: 29 October to 10 November 2023

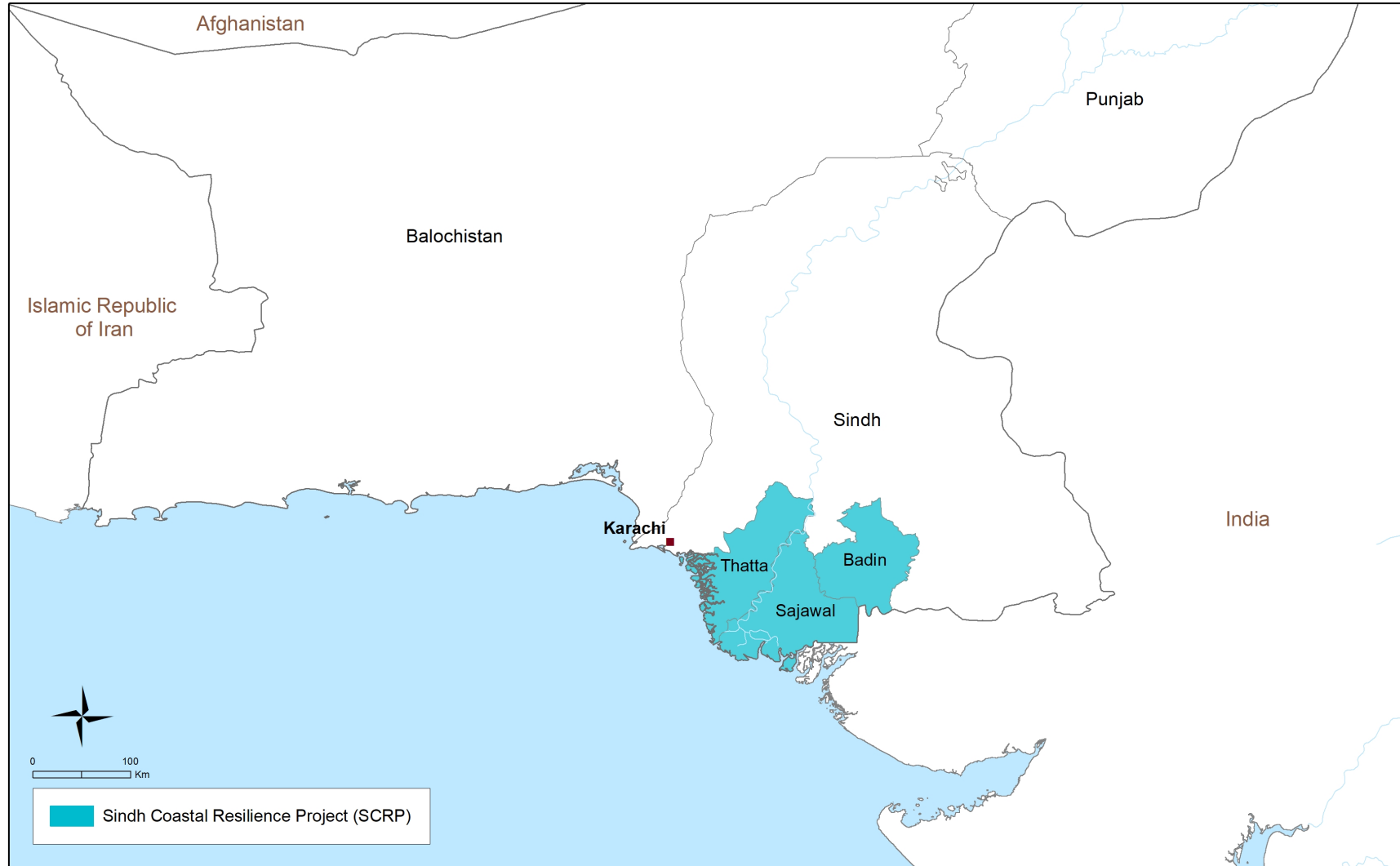
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Map of the Project Area



The designations employed and the presentation of the material in this map do not imply the expression of any opinion whatsoever on the part of IFAD concerning the delimitation of the frontiers or boundaries, or the authorities thereof.

Map compiled by IFAD | 19-08-2024

Abbreviations and Acronyms

4Ps	Public, private, producer partnerships
ADB	Asian Development Bank
AGP	Auditor General of Pakistan
AWPB	Annual Workplan and Budget
BISP	Benazir Income Support Programme
CDWP	Central Development Working Party
CO	Community Organization
COSOP	Country Strategic Opportunities Programme
DCU	District Coordination Unit
ECNEC	Executive Committee of National Economic Council
EIRR	Economic Internal Rate of Return
ESCMP	Environmental, Social and Climate Management Plan
ETI-GB	Economic Transformation Initiative, Gilgit-Baltistan
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FIRR	Financial Internal Rate of Return
FM	Financial Management
FMFCL	Financial Management and Financial Control Letter
FSP	Financial Service Providers
GAM	Global Acute Malnutrition
GEWE	Gender Equality and Women's Empowerment
GLLSP	Gwadar-Lasbela Livelihoods Support Project
GoP	Government of Pakistan
GoS	Government of Sindh
GDP	Gross Domestic Product
GHG	Greenhouse Gases
GRASP (EU)	Growth for Rural Advancement and Sustainable Progress – European Union
GRM	Grievance Redress Mechanism
IFAD	International Fund for Agriculture Development
IFI	International Financial Institution
IFR	Interim Financial Report
IMF	International Monetary Fund
IP	Implementing Partner
IPRM	Integrated Project Risk Matrix
IPSAS	International Public Sector Accounting Standards
KM	Knowledge Management
Km	Kilometer
KP-RETP	Khyber-Pakhtunkhwa Rural Economic Transformation Project
LSO	Local Support Organization
MIS	Management Information System
MPI	Multidimensional Poverty Index
M&E	Monitoring and Evaluation
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MSME	Micro, Small and Medium Enterprises
NBP	National Bank of Pakistan

NDC	Nationally Determined Contributions
NPGP	National Poverty Graduation Programme
NPV	Net Present Value
NRSP	National Rural Support Programme
NSER	National socio-Economic Registry
OBI	Open Budget Index
OPEN	IFAD's Online Procurement End to End System
O&M	Operation and maintenance
PASS	Federal Ministry of Poverty Alleviation & Social Safety
PD	Project Director
PDWP	Provincial Development Working Party
PEFA	Public Expenditure and Financial Accountability
P&D	Planning and Development
PAIDAR	Poverty Alleviation and Inclusive Development Across Rural Sindh
PDO	Project Development Objective
PIM	Project Implementation Manual
PMU	Project Management Unit
PPRA	Public Procurement Regulatory Authority
PSC	Project Steering Committee
RDMT	IFAD Resilience Design and Monitoring Tool
RED	Response to Emergency and Disaster
RSP	Rural Support Programme
SBP	State Bank of Pakistan
SCRP	Sindh Coastal Resilience Project
SDG	Strategic Development Objective
SECAP	Social, Environmental and Climate Assessment Procedures
SEP	Stakeholders' Engagement Plan
SPPAP	Southern Punjab Poverty Project
SRSO	Sindh Rural Support Organization
STEVTA	Sindh Technical Education & Vocational Training Authority
SUCCESS	Sindh Union Council and Community Economic Strengthening Support
Taluka	Sub-district
TOC	Theory of Change
TOR	Terms of Reference
TVET	Technical and Vocational Education and Training
UC	Union Council
UNSDCF	United Nations Sustainable Development Cooperation Framework
UVP	Umbrella Village Plan
WASH	Water, Sanitation and Hygiene
UNICEF	The United Nations International Children's Emergency Fund
UNIDO	United Nations Industrial Development Organization
UNSDCF	United Nations Sustainable Development Cooperation Framework
VO	Village Organization
WB	World Bank
WHO	World Health Organization

In line with IFAD mainstreaming commitments, the project has been validated as:

Be gender transformative Be youth sensitive Be nutrition sensitive Prioritize persons with disabilities Prioritize indigenous peoples Include climate finance Build adaptive capacity

Executive Summary

Pakistan, with 240 million inhabitants, is the world's 5th most populous country with per capita GDP of US\$ 1,596 (lower middle-income country). Sixty three percent of the population is rural and agriculture contributes 22 percent of GDP. Rural poverty at 43.5 percent is more than twice that of urban poverty (18.5 percent). Sindh is the second most populous province of the country. Agriculture contributes 24 percent of Sindh's GDP and generates 70 percent of the employment. However, the sector is facing challenge of fast degrading eco-system due to erratic canal supplies, sea intrusion and increasing salinity.

Sindh is afflicted with large pockets of rural poverty with half the districts classified as "high deprivation" districts. The three coastal districts of Badin, Sujawal and Thatta are considered the poorest with 84 percent multi-dimensional poverty. Only 16 percent of households own land. Rest derives their livelihoods as sharecroppers, tenants, daily wage workers, petty traders and subsistence inland and sea fisheries. Women and youth are particularly disadvantaged due to low skills and literacy levels and absence in community and household decision-making. Stunting at 63.5 percent is very high in these three districts. Food insecurity affects over 43 percent of the population.

The proposed project is in line with the two strategic objectives of COSOP 2023-2027 and national and provincial development and poverty reduction strategies. IFAD financing will complement, in parallel financing mode, a larger infrastructure ADB funding for improving the three districts' climate resilience through investments in drainage, floods and sea intrusion protection. ADB funding will also restore natural buffers like mangroves against sea inundation in agriculture production areas.

The SCRП goal is to reduce poverty and malnutrition and improve climate resilience among rural poor households, incorporating a gender-sensitive, youth-focused, nutrition-sensitive and climate change-responsive approach. Project Development Objective (PDO) is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. Project target groups include smallholder farmers (up to 16 acres of land), tenants and sharecroppers working on large land holdings, resource poor fisherfolk and landless poor daily wage earners. Young men and women from poor households with a poverty score of 0-32 will be offered opportunities for skill development for labour market, value chain participation and off-farm enterprises. Gender, youth, nutrition and climate change will be mainstreamed in all facets of targeting, planning, financing and implementation.

Project activities will be closely aligned with ADB infrastructure investments. Around seven poorest Talukas in the three districts and 53 Union Councils, selected on the basis of NSER-based ranking and prevalence of smallholder agriculture, will be covered. 195,000 households/1,014,000 persons will directly and indirectly benefit from the project of which 40 percent will be women and 30 percent youth. A participatory community owned and driven approach will be adopted to establish inclusive Village Organizations and Producer/Interest Groups and umbrella village plans will guide project's investments under all components. Experienced implementation partners will be engaged to assist in implementation.

The project consists of four main components: (1) Transformation of Coastal and Rural Incomes: Organized coastal and rural communities will be assisted to develop capacities for market oriented, climate resilient improved agriculture and fisheries production systems through strategic investments in training, infrastructure and provision of affordable finance; (2) Economic and Social Inclusion of Disadvantaged Groups: Provision of skills, enterprise development support and productive assets to ultra-poor households, in particular young men and women; (3) Project Management: Establishment of an efficient project management structure including a Project Steering Committee, Project Management Unit and 3 District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture; and (4) a Recovery from Climatic Calamities (RED component), triggered in case the Government of Sindh declares the project area (in total or part) affected by a climatic calamity.

SCRП will be implemented over seven years with a total cost of US\$ 163.5 million, with an IFAD loan of US\$ 60 million and a financing gap of US\$ 40 million potentially to be financed by IFAD under IFAD13 PBAS. GoS will contribute US\$ 6.7 million for operational costs and taxes, commercial banks will leverage US\$ 53.132 million, private sector will leverage US\$ 0.925 million in 4Ps and beneficiaries' contribution will be US\$ 2.8 million (in kind).

Main risks identified are country's macro-economic stability, political stability and high fiduciary risk classification of the country. Specific measures have been identified to mitigate the risks. Project's climate risk is substantial and climate change mitigation measures have been built into entire cycle of project planning and implementation.

The Planning & Development Board of GoS will be the lead implementing agency. A Project Steering Committee, chaired by Chairman P&D will steer and coordinate IFAD and ADB financing and ensure complementarity. An autonomous PMU, headed by a Project Director, and assisted by sectoral specialists, and three District Coordination Units, will lead the project implementation.

Three public sector departments, Agriculture Supply & Prices Department, Livestock and Fisheries Department, and Sindh Technical and Vocational Training Authority will be implementing partners. Specialized private sector agencies will be engaged for assistance in social mobilization and value chain/agribusiness development.

1. Context

A. National context and rationale for IFAD involvement

a. National Context

1. Pakistan is the world's fifth most populous country at 240 million inhabitants (2022 census) and the 33rd largest country area-wise at 796,095 sq. km. Sixty-three percent of the population is rural. Pakistan is a lower middle-income country with a per capita GDP of US\$1596, and overall GDP of US\$ 376.53 billion^[1]. Agriculture sector contributes 22 percent of the GDP, industry 20 percent and the rest is contributed by the services sector^[2]. Despite its smaller share in the economy, agriculture has a key role in the economy, absorbing 42 percent of the labour force and directly and indirectly contributes to 80 percent of the country's exports.
2. Pakistan's economy with its largely consumption-led growth model has experienced frequent boom and bust cycles. COVID-19 put the economy under serious stress during 2019 to 2021. The economy recovered to a six percent growth in 2022 supported by accommodative macroeconomic policies. Growth again declined to less than two percent in 2023 due to high energy prices, persistent high inflation rate, rapid devaluation of rupee, high interest rate (22 percent) and global economic slowdown. Situation was further exacerbated by heavy monsoon rains and flooding in 2022, submerging about 1/3rd of the country and displacing roughly 33 million people and causing heavy damage to crops, livestock and infrastructure totalling around US\$ 16 billion.
3. Despite achieving significant poverty reduction over the last two decades with 47 million Pakistanis escaping poverty, poverty remains a persistent challenge. Human capital outcomes remain poor and stagnant, with high levels of stunting at 38 percent and learning poverty at 75 percent.^[3] The country's multidimensional poverty index (MPI) is 0.198 with 38.3 percent of the population ranked as poor while 21.5 percent of the population is in severe multidimensional poverty^[4]. Poverty in Pakistan remains concentrated among rural households relying on agriculture. In 2018-19, rural poverty was 43.5 percent, more than twice as high as urban poverty (18.5 percent). Preliminary estimates suggest that as a direct consequence of the floods, the national poverty rate may increase by up to 4 percentage points, potentially pushing around 9 million additional people into poverty^[5].
4. **Sindh Province:** Sindh is the second most populous province in Pakistan with a population of 55.7 million^[6] and third largest in terms of area at 140,914 Sq.Km. Sindh has the highest concentration of urban population at 49 percent (country average is 32.5 percent). Sindh has a well-developed agricultural base supported by an extensive irrigation network on the Indus river. Around 14 percent wheat, 30 percent rice, 30 percent sugar cane, 25 percent cotton and 30 percent vegetable crops grown in Pakistan are from Sindh. With its 350 km coastline, Sindh has 48 percent share in fish export from Pakistan. Agriculture contributes 24 percent to Sindh GDP and generates 70 percent of the employment. Livestock and fisheries contribute over 50 percent of the agriculture GDP of the province. The poor derive 56 percent of their income from agriculture.^[7] Livestock provides critical income security for many rural households and is of particular importance to women and people lacking clear land tenure rights.^[8] However, the sector is facing alarming ecosystem degradation. Reduced and erratic flows in Indus river downstream of Kotri Barrage has resulted in irrigation water shortages and also triggered sea intrusion in the delta's productive areas (in surface and groundwater). Coupled with poor irrigation practices, soils are increasingly saline in some places and water-logged in others. Inland, riverine and coastal mangrove forests have become significantly degraded, intensifying the disruption of water cycle and leading to sea erosion. This degraded context heightens the impacts of climate change (see below) as well as the vulnerability of the local population.
5. Despite its resource endowments, Sindh is afflicted with large pockets of endemic poverty, particularly in rural areas. While the port city of Karachi and major urban centres are relatively well developed, the rural areas are relatively poorer compared to rural areas in rest of the country in terms of income and consumption poverty, vulnerability and nutrition statistics. Half the districts classify as high deprivation. The districts that were rated as very poor three decades ago continue to rank as such. In Sindh, 37 percent of the rural population is below the poverty line^[9]. The prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively and exceed the national averages of 20 percent and 38 percent respectively^[10].
6. The three SCRP target districts Badin, Sujawal and Thatta have a population of 3.87 million/697,262 households or 7 percent of the provincial population. The three districts are recognized as the most deprived and under-developed with a multi-dimensional poverty headcount of 84 percent^[11]. Only 16 percent households own agricultural land and 84 percent of the landowners own less than 25 acres^[12]. Small holdings, traditional low input low-output production systems, lack of access to technology, services and financial services, and small and scattered marketable surpluses keep performance of smallholder farming below potential. Coastal fisherfolk communities are the most deprived in terms of productive assets and social infrastructure/services. 84 percent of rural households work as tenants/sharecroppers, petty traders, artisans and daily wage earners. The three districts are also most affected by frequent extreme climate change events like flooding, cyclones and droughts.
7. **Relevant National and Provincial Strategies and Policies:**

8. **Agriculture and Rural Development:** Ministry of National Food Security and Research is the central policy and coordination body for agriculture sector and food security. National Food Security Policy aims to achieve reduction in poverty, malnutrition, and food insecurity by reaching an average growth of 4 percent for the agriculture sector. To enhance the productivity of major crops and livestock sectors, and improve water use efficiency, the federal government launched a five-year PKR 309 billion (US\$ 1.93 billion) National Agriculture Emergency Programme in 2020. The programme provides emergency support (mainly subsidies on inputs) and is being executed in coordination with the provinces.
9. Post 18th amendment to the constitution, provinces enjoy full autonomy in agriculture, rural development and social protection-poverty reduction in terms of legislation, regulations, policy making and investments, including loans from IFIs for the sector. Each province, including Sindh, now has policies on various aspects of rural development including agriculture, livestock, fisheries and rural poverty reduction. Sindh Agriculture Policy 2018-2030 seeks 4-5 per cent annual growth in the agriculture sector.
10. **Poverty Reduction and Social Protection:** Pakistan's poverty reduction efforts are guided by Pakistan Vision 2025, the 12th Five Year Plan 2018-23 and the Poverty Reduction Strategy 2019. The Vision 2025 aims to halve the poverty by 2025 (19 percent) and attain upper middle-income status for the country. The Federal Government's 12th Five Year Plan 2018-23 is aimed at reducing the Basic Needs-based poverty from 24.3 to 19.0 per cent by 2023 and reducing the multidimensional poverty headcount from 38.8 to 30.0 per cent.
11. **Benazir Income Support Programme and National Socio-Economic Registry:** Federal Ministry of Poverty Alleviation & Social Safety (PASS) leads the national effort for poverty reduction and operation of social safety nets for the poor and vulnerable. Its flagship programme, Benazir Income Support Programme (BISP), is a national social safety net programme that provides unconditional cash transfers (UCT) to over 6 million women from poor families and is one of the largest social safety net programmes in the world with over US\$ one billion in annual disbursements. A National Socio-Economic Registry (NSER), established in 2010-11 and updated through a 2018-19 survey, based on proxy means test-based poverty scorecard survey, guides the targeting of beneficiaries. NSER is now used by almost all government and IFIs funded programmes, including IFAD, for targeting of the poor. To enable the BISP beneficiaries to sustainably graduate out of poverty, the government introduced a comprehensive multidimensional poverty reduction strategy in 2019. IFAD, through its National Poverty Graduation Programme, is supporting the government in this endeavour through provision of productive assets and skills combined with interest free loans in 23 poorest districts of all provinces in Pakistan. Three independent evaluations have vouched for the effectiveness of the approach whereby over 80 percent households were found to have moved to higher income brackets on NSER^[13]. Government is now in process of institutionalizing the NPGP poverty graduation approach as a regular programme of the Ministry of Poverty Alleviation & Social Safety through initial allocation of Rs. 3 billion in national budget and further supplemented by under-process Islamic Development Bank loan of US\$ 100 million.
12. **Sindh Poverty Reduction Strategy:** Sindh Poverty Reduction Strategy, based on the lessons learned in EU and GoS-funded SUCCESS programme implemented in 15 districts, calls for a participatory community driven approach to address key development challenges of survival (water, sanitation, nutrition, shelter and health) and poverty graduation (literacy, vocational skills and enterprise development). The strategy supports Union Council-Based Poverty Reduction Programme that covers community infrastructure, a Community Investment Fund (for community managed credit provision) and Rural Service Hubs. The proposed Rural Services Hubs/Growth Centres are meant to provide services for agriculture and livestock (inputs, machinery, aggregation and marketing services etc.). A Joint Development Committee headed by Deputy Commissioner provides the district level planning, coordination and investment prioritization at Union Council and Taluka^[14] level.
13. **Sindh Agriculture Policy 2018-2030:** The policy is aimed at achieving 4-5 percent sector growth per annum through policy reform. It aims to improve production and productivity, facilitate access of smallholder farmers to productive resources, facilitate access to finance, promote nutrition sensitive agriculture production, encourage sustainable natural resource use, and build coping capacities for resilient climate smart agriculture.
14. **Gender Equality and Women Empowerment Policy 2020-2030:** Promulgated and steered by Women Development Department, the policy is aimed at putting in practice the international conventions of gender equality and women empowerment and covers 11 domains including rights of women and girl child, poverty and social protection, health and education, political empowerment, economic empowerment, gender-based violence and environment and climate change.
15. **Sindh Youth Policy:** Sindh Youth Policy, 2018 aims to empower young people across economic, social, and political spheres. It identifies key challenges faced by youth and proposes institutional mechanisms to address them. It lays out a comprehensive action plan spanning short, mid, and long-term strategies, but its targets and resource allocation were only established for the first five years (2018-2023). The primary focus of efforts to enhance the economic empowerment of youth revolved around bolstering education, cultivating new skill sets, offering vocational training, and extending support and financing for businesses led by young entrepreneurs.
16. **Programme for Improved Nutrition in Sindh (PINS):** Based on an EU funded Euro 90 million initiative in 10 districts, GoS plans to institutionalize the programme through own budgets to reduce the incidence of malnutrition and stunting among women and children under 5 with province-wide coverage.
17. **Key Relevant Institutions:**
18. **Federal and Provincial Governments:** At Federal level, Economic Affairs Division of the Ministry of Economic Affairs is the main coordinator for all international development assistance, including IFAD. At Provincial level, Planning & Development Board of GoS, headed by a Chairman and supported by Members for key sectors, is the lead provincial development planner as well as coordinator for international development assistance. Sectoral policies, projects and development budgets are implemented by an elaborate and reasonably well capacitated provincial departments headed by Secretaries and supported by Directorates and field staff. Relevant departments for SCRP include Planning & Development Board, Agriculture Supply & Prices

Department, Livestock and Fisheries Department and Sindh Technical and Vocational Training Authority.

19. **Civil Society and Rural Support Programmes:** Over 500 small and large national and international NGOs and civil society organizations are active in Sindh in areas of poverty alleviation, health, education, charity, post disaster rehabilitation and community development. Majority of them raise funds from public and international charities for their work. Three major rural support programmes, Sindh Rural Support Organization, Thardeep Rural Development Programme and National Rural Support Programmes, all created through government endowment funding, are actively involved in government and donor funded community driven development activities in almost all districts including SCRP target districts. Collectively, these RSPs have established three tier community organization structures, COs, VOs and LSOs^[15], for participatory development and micro-credit activities in the entire province. The three RSPs are implementing partners for IFAD-funded NPGP in 07 districts of Sindh Province, including the three SCRP target districts (23 Union Councils). Almost all the villages in the three target districts have community and village organizations sponsored by one of three RSPs. While all COs and VOs are assisted in identification of development priorities, the resource availability invariably is much less than the prioritised development needs. Despite their long history and participation in innumerable development projects, the CO/VO/LSO structure has no access-by-right to regular government development funding. As a consequence, their organizational activism, in majority cases, lasts for the duration of project interventions. However, a base remains available for quick revival whenever new resources become available.
20. **Financial Services Sector:** Pakistan, including Sindh, has quite well-developed banking and micro-finance sectors. However, both banks and micro-finance institutions have a pronounced urban and business/commercial lending bias and smallholder farmers and fisherfolk are outliers in terms of access to affordable credit despite fixing of agri-credit targets by the State Bank each year. Agriculture credit has remained just 5 percent of the private sector credit for many years and a major constraint for the smallholder agriculture in achieving the true production potential. Reasons include collateral requirements, complicated paperwork, lack of branch network and outreach in rural areas and very high interest rates in case of micro-finance institutions. This has forced most farmers to rely on an exploitative middlemen supplied credit who then also acts as buyer of the output on his terms.
21. **International Development Finance Institutions:** A number of international development institutions have a long-standing partnership with the Government of Sindh in rural poverty reduction, social protection, social sector development and agriculture and fisheries development. ADB and World Bank are the two largest IFIs in Sindh province and Pakistan. Both have a number of large ongoing development projects in the province. ADB financed the first integrated coastal area development project back in 2010 onwards and is in the process of finalizing a Post-Flood Housing and Social Infrastructure Rehabilitation Project. ADB will finance (parallel financing) the large climate resilience infrastructure component in SCRP (integrated water resources management, drainage, and flood risk management). WB is implementing a Sindh Water and Agriculture Transformation Project (US\$ 310 million), a post flood Housing Reconstruction Project (US\$ 500 million), a post flood Infrastructure Rehabilitation Project and a Sindh Integrated Health and Population Project. EU has a long-standing development partnership with GoS in areas of rural and community development, agriculture diversification and MSME development through SUCCESS, GRASP and PAIDAR projects. UNIDO and FAO have been implementing partners of EU in these projects. However, the coverage has been limited in terms of Union Councils and villages within each Union Council.

b. Special aspects relating to IFAD's corporate mainstreaming priorities

22. **Economic and Social Transformation of Rural & Coastal Communities:** In line with IFAD corporate priority to address the rural challenges of poverty, food insecurity and malnutrition, youth unemployment, gender inequality and climate adaptation, SCRP will enable the rural poor communities in three poorest districts of Sindh to overcome these challenges. IFAD investments in livelihoods enhancement will complement larger parallel financed ADB grey and green interventions for improved drainage, flood protection and prevention of sea intrusion in productive lands. Project support will contribute to enhanced incomes, nutrition and climate resilience for poor households through a flexible menu of demand-driven interventions responding to varying nature of challenges faced by smallholder farmers, small fisherfolk and landless poor with particular focus on women and youth.
23. **Women:** According to the Global Gender Gap Index Report 2022, Pakistan ranks 145 out of 156 countries for economic participation and opportunity, 135/156 for educational attainment, 143/156 for health and survival, and 95/156 for political empowerment. Women account for a mere 22.63 per cent of the labour force while men make up 84.79 per cent of the labour force^[16]. Agricultural sector is the largest employer of female workers in Pakistan, but only an estimated 19 per cent of women are in paid employment and 60 per cent work as unpaid workers on family farms and enterprises^[17]. On average, a Pakistani woman's income is 16.3 per cent of a man's income^[18]. There is a big disparity between male and female literacy in rural Sindh where only 24 per cent of women have education of 10 years or above as compared to 55 per cent of men. Education levels further deteriorate in the target districts of Badin and Thatta where only 23 per cent females have education of 10 years or above. According to the Labour Force Survey 2018-19, approximately 2.02 million women are in the labour force in Sindh, which is only 12.1 per cent of the total female population, compared to 68.5 per cent of men who are in the labour force. Women play an increasing role in Sindh agricultural and livestock sectors due to the migration of young men to cities and towns in and outside Pakistan^[19]. In the coastal areas, 78 per cent of the working women are engaged in fish and shrimp processing and the rest in making fishing nets and traditional crafts^[20].
24. **Youth:** 64 per cent of Pakistan population and 57 per cent of Sindh's population is below the age of 30^[21], which makes it one of the youngest countries in the world. 29 per cent of young people are illiterate and only 6 per cent have more than 12 years of education. 39 per cent youth are employed (32 per cent males/7 per cent females). 57 of 100 youth (16 males and 41 females)

are neither working nor seeking jobs, and only 4 per cent are unemployed and actively looking for work^[22]. According to Labour Force Survey 2020-21 by Gallup Pakistan, overall unemployment rate in Sindh is 3.9 per cent but it is substantially higher among youth. Lack of education and employable skills together with paucity of off-farm job opportunities is keeping large number of youth outside of job market. Situation is even more dire for young women. The Sindh Youth Policy (2018) emphasizes economic empowerment of youth with short and mid-term strategies for information and awareness about employment sectors, mapping of skills and demands of different sectors in job markets, provision of hassle-free loans for business, promotion of gender equity and equality and promotion of rights of the vulnerable youth groups.

Main challenges and opportunities by youth sub-groups		
Sub-group	Specific challenges	Opportunities
Young women	<ul style="list-style-type: none"> • High illiteracy rates • Limited employment opportunities in rural areas • Lack of access or control over productive assets • Limited healthcare access 	<ul style="list-style-type: none"> • Communities that had been previously supported are more receptive to gender-based approaches • Closeness to Karachi allows access to more dynamic job opportunities • Replicable models for women skills and enterprise development in IFAD NPGP and SPPAP available
Young farmers (men and women)	<ul style="list-style-type: none"> • Land access and fragmentation of plots • Limited participation in community/producer organizations decision-making • Unsustainability of current productions in the long-term (mainly due to water management issues) • Lack of access to financial institutions 	<ul style="list-style-type: none"> • Interest in alternative productive practices • Better education and literacy levels than previous generations • Capacity to adopt new technologies • Establishment of participatory farmer organizations to give youth voice and agency in community decisions
Young fisher folks (men and women)	<ul style="list-style-type: none"> • Unsustainability in the long-term due to general overfishing of the resource • Lack of access to financial institutions 	<ul style="list-style-type: none"> • Availability in the area of alternative value-chains and growing presence of aquaculture practices • Better education and literacy levels than previous generations • Capacity to adopt new technologies
Landless and ultra-poor young (men and women)	<ul style="list-style-type: none"> • Limited vocational skills and employment opportunities • Lack of skills and resources to develop self-enterprise • Vulnerability to exploitation 	<ul style="list-style-type: none"> • Skill provision with facilitated access to employment and enterprise opportunities • Spin-off job opportunities from project supported value chains • Priority of provincial and national government on graduating approaches • Better education and literacy levels than previous generations

25. **Food Security and Nutrition:** Despite being a food surplus country, 37 per cent of the population in Pakistan faces food insecurity^[23]. Pakistan has a global acute malnutrition (GAM) rate of 17.7 per cent, exceeding the emergency threshold^[24]. In Sindh, malnutrition affects 34 per cent of overall population but is more acute among children affecting 3.4 million or 1 out of 2 (50 per cent) children under the age five while 23.2 per cent are experiencing wasting. Children in Hyderabad division, that also includes Badin, Thatta and Sujawal, are more likely to be stunted (63.5 per cent) than those in other divisions. Additionally, 5 per cent of rural children are underweight. Severe vitamin A deficiency is experienced by 16.4 per cent of rural children. Anaemia is prevalent in 61.2 per cent of the Sindh under 5 population in rural areas. Adolescent girls have the highest prevalence of underweight (16.6 per cent) comparing to other provinces. Among women and girls of reproductive age, the proportion of women achieving minimum dietary diversity is lowest in Sindh (16.5 per cent) compared to other provinces^[25]. Lack of education and nutrition awareness combined with inadequate access to safe drinking water and sanitation are other contributory factors.

26. **Climate Change:** Pakistan is one of the ten most affected countries in terms of climate change and variability, ranking 5th in the Long-Term Climate Index.^[26] Signals of climate change in Pakistan are consistent with the global warming.^[27] Annual temperature of Pakistan has increased by 0.57°C from 1901 to 2000 and it has risen by 0.47°C in the period from 1960 to 2007. According to the Intergovernmental Panel on Climate Change (IPCC), there has been 0.6 to 1.0°C rise in average temperatures since early 1900s in the coastal areas of Pakistan. The Climate Risk Profile of Pakistan by World Bank and ADB (2021) has reported that Pakistan faces rates of warming considerably above the global average with a potential rise of 1.3°C–4.9°C by the 2090s over the 1986–2005 baseline. A recent study^[28] has analysed 57 years (1961-2017) time series climate data of Thatta, Sujawal and Badin districts and has shown rising trends in temperature. This study has concluded that the margin between the mean annual maximum and minimum temperature continues to get narrower. Mean rainfall in the arid plains of Pakistan and the

coastal belt has decreased by 10-15 percent since 1960, contributing to the ongoing degradation of the country's wetlands and mangrove ecosystems. The frequency and intensity of extreme climate events is projected to increase, increasing disaster risk particularly for vulnerable poor. Parts of Sindh province, including the three target districts, have had very limited rainfall in recent years affecting cropping cycle and production. These drought conditions were punctuated by episodes of very heavy rainfall in 2010 and 2022, which caused flooding. Due to the flat topography of the province, flood water stagnate for several months with severe negative impacts on crops, livestock and human health as was observed during 2022 floods. Some areas in the three districts are still uncultivable due to water accumulation and lack of adequate drainage. Higher temperatures will increase water requirements for both crops and animals.

27. **Environment:** SCRP's three target districts are facing serious environmental challenges. Reduced Indus water flows below Kotri Barrage is resulting in increasing water scarcity for both irrigation and groundwater recharge, resulting in increasing brackishness of underground aquifer, the saltwater intrusion into the Indus delta, increased soil salinity, deterioration of mangrove cover, and loss of marine fisheries resources. Untreated industrial effluents and raw sewage and solid waste from human settlements is being dumped in sea, damaging the coastal mangrove and marine eco-system. Sanitation facilities are non-existent in most rural settlements and open defecation is the norm for large majority of households. Underground water is brackish in most areas and access to potable drinking water is highly constrained.
28. **GHG Emissions:** Pakistan's agriculture sector contributes 38 per cent to GHG emissions and livestock contributes 52 per cent thereof. Pakistan contributes less than one per cent to global emissions, but it is growing fast at over three times the global rate, according to data from 1990–2018.^[29] Other contributors are nitrous oxide from agricultural soils and use of chemical fertilizers (46 per cent), and rice cultivation and crop residue burning (seven per cent).^[30] Considering the increased population growth and demand for livestock products, the livestock herd is projected to increase at an estimated three per cent per annum, which can increase absolute GHG emissions and aggravate environmental impacts. Aquaculture systems are currently mostly extensive with few production inputs and GHG emissions. Moving to intensive systems is expected to increase absolute emissions. In addition, a study conducted on water sources by Sindh's Environment Protection Agency showed that only 22 per cent of fish farms complied with World Health Organization standards. Introducing sustainable and climate-smart practices in agriculture, livestock and aquaculture production can help improve climate resilience and decrease livestock's GHG emissions intensity.

c. Rationale for IFAD involvement

29. Sindh is the population-wise second largest province of Pakistan and has the highest incidence of rural poverty. Within Sindh, the three target districts are the poorest with 84 per cent of the population living below multidimensional poverty line^[31]. This puts them at extreme risk of exposure and loss of life from natural hazards associated with climate change and man-made environmental impacts. Drivers of poverty include highly skewed land ownership, poorly developed agriculture and fisheries value chains, socio-economic infrastructure deficits (in particular potable water, energy and sanitation), inaccessibility to production technology and affordable financial services, high illiteracy rates, lack of productive assets in poor households, lack of skills for remunerative jobs, and production base vulnerability to environmental and climate change factors. Women and youth are particularly disadvantaged. The rural poor consist of heterogenous communities and sub-groups and need an inclusive but nuanced, flexible and demand driven set of interventions to overcome the poverty challenge. IFAD portfolio in Pakistan, one of the largest in APR, has successfully demonstrated its capacity to organize smallholder farmers and fisherfolk for value chain participation (ETI-GB, GLLSP), effectively target the landless poor and graduate them out of poverty (SPPAP, NPGP), assist women and youth to develop skills and integrate in local economic opportunities (SPPAP, NPGP), improve access to affordable finance (SPPAP, NPGP), implement coping actions and develop resilience against environmental degradation and climate change (ETI-GB, NPGP), and address the socio-economic infrastructure deficits in a community owned and driven process (SPPAP, ETI-GB, GLLSP). This experience offers a scalable template to address the causes of poverty of various segments of population in the project area in an inclusive manner.
30. The project objectives and interventions are also fully aligned with the two strategic objectives of COSOP 2023-2027, namely (1) Enhancing the productivity and profitability of smallholder farmers through climate resilient diversification and an agri-business approach, and (2) Fostering inclusion of the landless and ultra-poor households through an economic graduation approach. The proposed project will contribute to poverty reduction targets outlined in the Government's Vision 2025, Poverty Reduction Strategy 2019, National Food Security Policy and Sindh Government's Women and Youth Empowerment policies.
31. ADB is providing a sector loan to Government of Sindh for SCRP, aimed at providing key large drainage, water resources and flood management and green (mangrove and inland forestry) infrastructures for protection of communities from climate change vagaries. Based on IFAD's proven track record and comparative advantage in pro-poor targeting, social inclusion, poverty graduation and last-mile delivery, and production and value chain development for the rural poor, ADB and GoS requested IFAD to design and finance the Livelihoods component of the project^[32]. The unprecedented partnership with GoS and ADB offers an opportunity to leverage successful initiatives of IFAD country projects in the poverty graduation of smallholders, landless, women and youth through an inclusive and demand driven strategy, approach and interventions.
32. IFAD financing will be a complementary parallel financing in the three target districts. The geographic alignment of IFAD and ADB investments will be ensured through the common Provincial Steering Committee and project level Coordination Committee consisting of IFAD PMU and ADB Project Implementation Units in Irrigation and Forestry Departments. IFAD investments will leverage local community knowledge and needs in the selection of priority ADB investments, their design and coverage contours and longer-term community ownership and engagement in maintenance and protection of infrastructure and green investments. IFAD supported community level infrastructure investments will be aligned with larger ADB investments to maximize the impact at farm and community level.

B. Lessons learned

33. Pakistan has one of the largest IFAD portfolios and a number of lessons can be drawn from the on-going projects as well as from the projects in the region with similar objectives and target groups. Some of the relevant lessons guiding the design of SCRP include:
- **Targeting:** National Socio-Economic Registry offers a credible and transparent instrument for targeting of poor households together with poverty based geographical ranking of the Talukas and Union Councils in a district. An inclusive and culturally acceptable approach to targeting, based on household profiling, opens up opportunities for specific disadvantaged groups such as youth and women for economic inclusion. Design should incorporate measures that foreclose the possibility of elite capture (ADB 1994/2005).
 - **Participation and Empowerment:** A participatory approach with an empowered role of communities in needs identification, planning, financial management and procurement ensures strong local ownership and future sustainability of interventions. Community based organizations aligned with participatory needs assessment and planning processes provide opportunities for gender and youth inclusion (World Bank 2013, USAID 2014, ADB 2014, IFAD 2014).
 - **Response and Intervention Flexibility:** Nature and causes of rural poverty are not uniform across the afflicted households with different natural, material and human endowments, and need a nuanced and flexible menu of interventions to match the circumstances of different income bands to sustainably get out of poverty (IFAD 2018).
 - **An Inclusive Village-Wide Approach:** For a holistic transformation of a rural community's economy, an inclusive demand driven approach covering all segments (small farmers and fisherfolk, sharecroppers, landless daily wagers, youth and women) is necessary.
 - **Smallholder Market Access and Commercialization:** Market access can be improved through producer group organization, aggregation and quality improvement. Addressing market information asymmetry, production practices, and equipment and tools facilitate marketing and transportation. Support for first-stage processing can have the benefit of creating demand for higher-value products from farmers, while making it easier to link into domestic or export markets. The existence of local value chain clusters is often a prerequisite for successful value chain development (IFAD ETIGB, World Bank 2011, USAID 2016).
 - **Capacitated Service Providers:** Lessons from APR region show that development of inclusive and climate-resilient value chains benefits from developing capacities of local public and private sector service providers (NGOs, VC partners and microfinance institutions) linked to producer organizations and community institutions under performance-based agreements [\[33\]](#).
 - **Rural Finance:** Pakistan is the least banked country and only 10 percent of the population has a bank account. Smallholder farmers are particularly poorly served despite many of them being bankable and forcing them to rely on exploitative lending sources. Banks don't have the required coverage in rural areas and microfinance institutions cover only 11 percent of the potential rural clientele. Pioneering work under SPPAP and AusAid Market Development Facility [\[34\]](#) have shown that innovative low cost delivery channels and adaptive credit products can achieve wider coverage and reduce transaction costs and improve affordability (World Bank 2020, IFAD 2014). IFAD's Lessons learned: Lines of credit (2014) include the following key lessons which will guide the implementation of SCRP's credit component: potential partner financial service providers (FSP) must be subjected to a rigorous due diligence exercise verifying that the FSP is financially sound (e.g. has strong management and governance and a well-performing loan portfolio, is adequately capitalized and has good operational systems), has an established track record, as well as the requisite skill base and reporting systems to successfully manage the funds lent to them. Financial products and methods should be adapted to the specific needs of agricultural stakeholders. The extension of loans to end-borrowers must be accompanied by a range of financial services to help tie these clients to the FSP, including savings services, money transfer services and insurance. Lessons from the Programme for Increasing Sustainable Microfinance (PRISM, 2008-2014) and Measuring the Impact of Microfinance in Pakistan (2016) have shown that robust M&E systems, regular reporting, and effective data management for microfinance projects is crucial to fully track the performance and targeting of credit lines.
 - **Skills for Income Generation:** Training, in particular skill training for employment or self-enterprise, should be based on market demand and an integrated approach combining support in the form of assets provision, access to affordable credit, and appropriate level of longer-term mentoring to initiate and sustainably ensure poverty graduation (USAID 2014, IFAD 2023).
 - **Support Socio-Economic Infrastructure:** For a wholesome impact in terms of incomes, nutrition, food security and climate resilience, community infrastructure deficits, in particular drinking water and energy, need to be paid equal attention (EU 2019).
 - **Project Design:** Avoid prescriptive and complex design. Any new approaches should be first piloted, testing their efficacy and impact, and then rolling out at wider scale. Limiting the number of components and implementing partners is also advisable (ADB 1999/2009/2010/2011/2014).
 - **Start-up Delays:** Persistent start-up delays of the projects in Pakistan and region can be overcome through recruitment of core staff (Project Director, Finance Manager etc.) and completion of key preparatory activities (PIM, AWPB etc.) at least three months prior to loan effectiveness date (IFAD, Mansehra Village Support Project).
 - **Financial management:**
 - Financing for key start-up activities would be negotiated with the Government. Consider counterpart financing, pre financing by GoS or start-up funds.
 - Enhance the PMU's systems and capacity for the supervision, monitoring and oversight of implementing partners. Invest in the capacity building of community/producer organizations on FM, develop and disseminate guidelines, tools, and reporting templates to the community/producer organizations and ensure uniform systems of controls and accounting.
 - Implement internal audit function or similar internal mechanism. Engage Office of the Auditor General to perform compliance verifications on key project activities and engage the new internal audit function set up by WB/GoP to perform internal audit.
 - Acquire relevant accounting systems that are customized and compatible with the project financial reporting.

2. Project Description

C. Project objectives, geographic area of intervention and target groups

34. The **goal** of the **Sindh Coastal Resilience Project (SCRP)** is to reduce poverty and malnutrition and improve climate resilience among rural poor households, incorporating a gender-sensitive, youth-focused, nutrition-sensitive and climate change-responsive approach.
35. **Project Development Objective (PDO)**^[35] is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of diversified nutritious foods of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilitates access to financial resources and support services.
36. **Project Target Groups:** Project target groups include smallholder farmers (up to 16 acres of land), tenants and sharecroppers working on large land holdings, resource poor fisherfolk and landless poor daily wage earners. There are 115,650 farms in the three target districts out of which 96,600 farms can be categorized as small farms.^[36] 84 percent of households are landless and earn their living as tenants, sharecroppers and daily wage earners. There are around 11,000 fisherfolk households and 90 percent of them work as hired hands on other's boats. Women headed households will be in particular targeted. Young men and women^[37] from poor households with a poverty score of 0-32^[38] will be offered opportunities for skill development for labour market, value chain participation and off-farm enterprises. Gender and youth will be mainstreamed in all facets of planning, implementation and outcomes. Of direct beneficiaries, **40 percent will be women and 30 percent youth**. Among youth a 60:40 ratio will be ensured for males and females respectively.
37. **Project Beneficiaries:** An estimated 195,000 households (1,014,000 persons), almost 25 percent of the total rural households in the three districts, will directly and indirectly benefit from the project interventions in value chain development, community and value chain support infrastructure, access to credit and productive assets and vocational training. Smallholder farmers, fisherfolk and landless poor in 500 revenue villages (*Deh*) will be engaged through 500 inclusive Village Organizations in first five years of project implementation (160 in Badin, 125 in Sujawal and 215 in Thatta). Under each VO, an umbrella VO plan will identify the interest based on commonality of production base, vocation and sources of livelihoods, leading to individual interest group value chain plans. The umbrella plans will also identify priority community and value chain infrastructure deficits that need to be addressed. The umbrella plan and interest group plans will be prepared and supervised with the assistance of professional implementation partners. The participatory process will ensure nutritious crops and commodities are identified that can address the challenges related to nutrition while also being climate-resilient and economically viable. The engagement with the VO will also attempt to map the local indigenous foods that are climate resilient and nutritionally superior, and work on a plan to explore its mainstreaming into diets of communities. Apart from agriculture, fisheries and livestock/dairy production groups, interest groups among the landless and youth will be promoted to earn incomes from provision of various inputs and output harvesting, processing, value addition and marketing. The incremental approach is aimed at leading to a critical mass of producers of niche products and marketable surpluses in each region, confederated into producer organizations, to enable them to enter 4P (public-private-producer partnerships) and contract farming agreements.
38. **Taluka, Union Council and Village Targeting:** SCRCP targets the three poorest coastal districts of Sindh i.e. Badin, Sujawal and Thatta. In geographical targeting within districts, the project will align its interventions, to the extent possible, with larger ADB climate resilient green and grey infrastructure investments for enhanced impact^[39]. In geographical targeting, the project will also keep in view the investments under other government and donor-funded programmes in areas related to project scope to ensure complementarity and avoid duplication. The climate and environment related larger investments identified in the village umbrella plans will be submitted to ADB's project Management Units for potential finance and coordinated through joint Project Steering Committee. Climate change vulnerability will be one of the primary criterion for selecting villages. Subject to that, the project uses a composite criterion for the targeting of poorest Talukas and Union Councils therein. This includes NSER poverty ranking of Talukas and Union Councils within the target Taluka, agriculture and/or livestock and fisheries value chains development potential, prevalence of smallholder farming and small-scale fisheries, high vulnerability to climate hazard, and consideration of other recent and/or ongoing development projects and government's annual development plan interventions. SCRCP will cover three poorest Talukas in Thatta and two each in Sujawal and Badin^[40]. In targeted Talukas, 53 Union Councils will be covered, including all coastal UCs with predominantly fisherfolk population. The UC coverage in selected Talukas in each district will be Badin (23), Sujawal (12) and Thatta (18)^[41]. Within the selected Union Councils, the 500 villages (*Deh*)^[42] selection will be prioritised on the same criteria as used for the UC selection. The target numbers and intra-district allocations will be reviewed at MTR.
39. **Project Design and Approach:** Project design and approach is influenced by lessons learned in successful on-going IFAD projects within Pakistan and in the region. Establishment of market-oriented farmer interest groups is based on the success of similar initiatives in SPPAP and GLLSP-I. The socio-economic development of disadvantaged groups is based on the successes and impact of SPPAP and NPGP, the latter covering 23 Union Councils in the SCRCP target districts as well^[43]. An inclusive all-village approach will be adopted in targeted villages so as to leave no one behind. The social capital available in most of villages under NRSP and SRSO supported social mobilization will be built upon but with a difference. Instead of Community Organizations of 18-20 households with multiple COs in same village, inclusive Village Organizations will be supported leading to formation of interest groups, under the umbrella of an inclusive VO, based on member's vocations, resource base, potential and preference.

40. The project intervenes in districts characterized by a large economic and social dependence of smallholders on landowners and middlemen, a large proportion of landless poor, fast degrading ecosystems and increasing climate hazards. These realities have interlinked consequences: low agricultural productivity, limited income generation opportunities and high vulnerability to shocks, food insecurity and malnutrition. To strengthen rural resilience and fight rural poverty, the project adopts an integrated multi-dimensional approach through promotion of climate smart agriculture with strengthened access to competitive markets and financial services, provision of support community and value chain infrastructure, aligned with larger ADB investments, and tailored interventions for landless and youth for improved incomes. In doing so, integration of mainstreaming themes will be ensured in all facets of planning, implementation and outcomes (Youth, Gender Equality and Women's Empowerment, Nutrition, Climate and Environment).

D. Components/outcomes and activities

41. **Project Components:** The project consists of four complementary components that address the causes of vulnerability, poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fisherfolk and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.
- Transformation of Coastal and Rural Incomes: Coastal and rural communities organized and assisted to develop capacities for market oriented, climate resilient improved and nutrition sensitive agriculture and fisheries production systems, and value addition and transition to higher value outputs/products, based on structured sustainable value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.
 - Economic and Social Inclusion of Disadvantaged Groups: Job market and small business development, facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored business, technical and vocational service provision.
 - Project Management: Establishment of an efficient project management structure: a Project Steering Committee, Project Management Unit and District Coordination Units.
 - *Recovery from Climatic Calamities*, triggered in case the Government of Sindh declares the project area affected by a climatic calamity.
42. **Component 1. Transformation of Coastal and Rural Incomes:** The objective of this component is to organize the target villages for development and implementation of inclusive income generation value chain-based plans for different income/interest groups. Target villages will be organized in an inclusive VO and assisted to develop an umbrella plan identifying various producer and interest groups, based on commonality of vocation/interest/livelihood sources, and priority community and value chain infrastructure needs. This will be followed by value chain plans for interest/producer groups, including training and technical assistance needed, production technology demonstrations, and credit demand. In parallel, the landless poor and youth from poor families will be organized in interest groups for identification of interventions for income generation under component 2. This will be achieved through four mutually reinforcing sub-components:
43. **Sub-Component 1.1 Organization, Planning & Training:** 500 villages of agricultural and fishing communities, in 53 Union Councils, selected as per project's selection criteria, will be covered in the first five years of the project. Almost all villages in the three districts have some form of community/village organization which will be used as Project's entry point by the implementing partners, and will be further reorganized and strengthened to ensure equitable inclusion of all project target groups. Villages that otherwise qualify as target villages but with no village organization will be assisted to establish one. Services of implementing partners (IP) with demonstrated capacity for social mobilization, agriculture/ nutrition sensitive value chain development, training and capacity building and poverty graduation of landless poor, will be engaged for this purpose. Project will deploy a comprehensive communication campaign at the start involving radio and televisual media, as well as electronic and print media to inform the potential beneficiaries about project approach, interventions, eligibility and roles and responsibilities. This will be further backed by use of Agriculture, Livestock and Fisheries Extension staff to inform the target cohort. This will be followed by IPs and Extension staff visits to target villages to organize the willing villages into partner VOs, as per the well-established process in prevailing social mobilization approach. The VO will be inclusive in nature and form in which every household in the village is represented and has a voice. The key implementation steps will be the following:
- Step 1: *Targeting, Community Mobilization and VO formation:* Selection of UC and villages as per project selection criteria; project introduction, community assent/agreement and election of VO office bearers where women and youth representation in management positions will be encouraged. (*Output: VOs established/reactivated*)
 - Step 2: *Rapid village socio-economic, and infrastructure diagnostic:* It will be a participatory exercise involving all households, including women and youth, to identify incomes/interest groups and sources of income, contributory factors/challenges in income enhancement, community and value chain support infrastructure deficits/gaps, climate change related challenges and practices, and mitigation/adaptation related infrastructure needs, women and youth status and needs, and nutrition and food security challenges. A standard format will be included in the PIM to guide the process. (*Output: Village level diagnostic*)
 - Step 3: *Umbrella Village Plan:* Based on rapid assessment, an umbrella village plan will be formulated in a participatory and inclusive manner. Umbrella plan will be presented in general VO assembly for endorsement through a written resolution. See detail in paragraph 44 below (*Output: 500 VO Plans*).
 - Step 4: *Establishment of sub-village level Producer/Interest Groups:* The interest groups identified in the VO Umbrella plan will be assisted to organize around a value chain plan for their preferred production/vocation. Specifically, this entails:
 - *Production Interest Groups readiness and Plans:* IP's business development staff will assist each production interest group to elect head and secretary/record keeper, develop their *value chain plan* (agriculture and/or fisheries), identify training, technical assistance and demonstration needs, and identify support investments for equipment and

structures, and credit. Value chain plans will be submitted for PMU approval. For the credit needs identified, the IP staff will link the interest groups with credit provision partner(s) (see sub-component 1.3). (*Output: Interest Groups' Value Chain Plans*)

- *Disadvantaged Households' Interest Groups:* In the interest group formation process, the ultra-poor and BISP beneficiary households and young men and women from such households and other low-income households will be identified as distinct interest groups for assistance under component 2 through productive assets grants, vocational and technical training, and group and self-enterprise development grants.
 - *Step 4-A: Design of priority infrastructure:* in parallel with the previous activity, the identified community infrastructure will be designed and costed by IP's engineering staff and approved by PMU (implementation will be part of sub-component 1.2). All existing and new infrastructure in the village will be geo-referenced.
 - *Step 5: Mentoring, supervision and exit:* Every VO and interest groups therein will be supported for the duration of their plan implementation which will be about 30 months. IP staff will maintain close and regular contact to ensure that agreed activities in the umbrella village plan and interest groups' plans are effectively implemented. Close mentoring and handholding of component 2 beneficiaries will be ensured.
44. ***Umbrella Village Plan (UVP):*** Umbrella Village Plan preparation will be on a standard format issued by PMU for guidance and observance. A Draft Template will be provided in the Project Implementation Manual (PIM) for guidance. The plan will identify and facilitate implementation of core project investments and mainstreaming themes. Part 1 of the plan will cover production, productivity and value chain development challenges and response, including challenges related to climate change and nutrition, identification of producer/interest groups for support, subsidized credit needs of the beneficiaries and identified extension support partners. Part 2 of the plan will identify the community and value chain support infrastructure investments, as well as infrastructure needs to adapt to/mitigate climate change impacts (both for IFAD and larger ADB investments), estimated costs and phasing. Part 3 of the plan will identify the beneficiaries for poverty graduation interventions and job-market integration of the youth. Part 4 of the plan will cover interventions related to mainstreaming aspects including youth, gender, nutrition, WASH, climate and environment.
45. Each Plan will be of two and half year (30 months) duration or 5 cropping cycles. The plan in the first stage will address the existing challenges of sub-optimal production, lack of aggregation, middlemen dependence for inputs and marketing, weak extension support, climate vulnerability and climate adaptation, quality assurance and value addition. In case of agriculture, livestock and fisheries interest groups, the value chain plan will demonstrate net incremental income per member by end of the term. The plan would also aim to improve production and market-linkages of diverse nutritious foods that have the potential to address the nutritional challenges. The IP will continue to provide support and oversight for the plan implementation for 30 months.
46. ***Producer/Interest Groups:*** About 300 households, on average, will be covered in each revenue village consisting of smallholder farmers, fisherfolk, tenants and sharecroppers, landless poor including youth and women. Any large landholders in the village will not be excluded from the VO as long as they commit to abide by VO democratic process and project guidelines. Examples of producer/interest groups include: crops production, high value crops that are nutritionally superior and climate-resilient, products aggregation, integrated farming (agriculture, livestock and fish), value addition and marketing, agri-service provision, livestock for meat/fattening, dairy production, marketing, value addition, fisheries, aquaculture, mariculture, fisheries processing, preservation, grading, marketing, traditional crafts production/marketing etc. Each producer/interest group will range from 5 to 40[44] members and each revenue village will, on average, have around 10/20 interest groups. Mixed interest groups of men and women will be established where socio-cultural norms allow and measures will be taken to ensure meaningful participation of women. In other cases, women and youth only interest groups will be promoted to socially and financially empower them. Youth and women supported through enterprise grants will also be assisted to form interest groups around common business plans.
47. Livestock producer/interest groups will be for both dairy and meat animals. Particular focus will be on households dependent on dairy and meat animals for their livelihoods. The Groups' value chain plans will cover aspects of breed and feed improvement, water and shelter, milk collection, preservation and transport, value addition and by product development and collective marketing of dairy products and meat animals. Such groups will be identified and supported particularly in the hilly areas of project coverage where there is little crop production potential and areas affected by salinity and water logging. Manure recovery will be encouraged to contribute to climate smart agriculture, including e.g. via kitchen gardening.
48. Producer/Interest Groups, particularly of youth, interested in provision of input supply, harvest services, pest management, product processing, safe storage, refrigerated transport if needed, packaging, nutrition labelling and value addition, product marketing services, off-shore/inland aquaculture development will be prioritised. They will be linked to project grants for productive assets as well as credit services for procurement of required equipment and small machines for service provision, enterprise upscaling etc.
49. Once a critical mass of producer groups engaged in particular crop/commodity is reached, they will be supported to confederate into producer organizations and facilitated to engage with private sector under 4P and or contract farming arrangements.
50. ***Value Chain Approach:*** A value chain analysis will underpin the crop selection and production plan of each group. Value chain analysis of most cash crops has already been carried out by FAO and are readily available. For other, the IPs will develop such an analysis. Based on this analysis, project support will be focused on assisting the farmers and fisherfolk to achieve true production potential of their existing economic activity and get fair market return through access to improved inputs (including nutrient-rich varieties and self-produced inputs such as compost or biopesticides), production technology, affordable credit services, training, extension services, aggregation/grading and competitive markets. At the same time, smallholder farmers will be assisted to transition to market demanded higher value products, value addition, processing and aggregation. From project year 3, interest groups engaged in similar products in a Union Council will be assisted to federate and 4Ps will be pursued. In poor and degraded land, close to coastal areas, alternate agricultural productions could be developed according to Villages

motivation and actual skills, such as aquaculture or fodder production in tidal areas (via adapted crops).

51. **Complementarity with ADB Investments:** ADB is providing a sector loan to government of Sindh for SCRP's grey and green infrastructure investments in drainage, mangrove and inland forestation, and institutional strengthening to mitigate the impacts of climate change. IFAD livelihood component design has been completed prior to ADB design which is likely to be completed in early 2025. IFAD's tentative Taluka and UC selection has been shared with ADB design team for prioritization of ADB schemes that directly benefit the IFAD targeted communities. The initial ADB shortlisting of sub-projects is closely aligned with IFAD covered Talukas and Union Councils. Going forward, the needs for such larger support infrastructure will be identified in the VO umbrella plans and shared with ADB's Project Implementation Units in Irrigation and Forestry Departments for potential inclusion under ADB financing. This integration will be facilitated through the joint Project Steering Committee at P&D and a formalized project level Coordination forum consisting of IFAD PMU and ADB PIUs in Forestry and Irrigation Departments.
52. **Producer/Interest Groups' Training and Demonstrations:** Based on the value chain plan of each production related interest group, necessary training and/or demonstrations will be financed by the project to enable them to fully understand the processes and practices for realization of the plan objectives. Depending on the subject, the training & demonstrations will be delivered by IPs specialists, partner extension agencies and external specialized agencies like FAO in locations that are also accessible and safe for women. The trainings may cover, but are not restricted to, production practices and/or technologies, grading and packaging, aggregation and marketing, value addition/processing, adoption of higher value crops, selection of crops based on the income-earning potential, nutritional-superiority and climate resilience, efficient input use, climate adaptation, water conservation and efficiency, post-harvest loss reduction, off-shore/inland aquaculture (fish, shrimp, crab), farm services provision, off-farm income generation, traditional crafts, financial literacy, nutrition etc.
53. **Youth inclusion, GEWE, Nutrition and Climate adaptation:** Village plans will pay specific attention to the four mainstreaming themes. All the envisaged activities and structures under SCRP at village level will be screened to build connections with the four themes to possible extent. Within the target group of SCRP, the project will ensure that the particular constraints and needs of women and youth are addressed by the VOs and interest groups, to ensure that not only are they effectively able to participate but also to benefit. Where feasible women only Interest Groups will be established. All VO development plans will be subject to environment and climate adaptation screening, not only in terms of risk, but also in terms of agricultural practices and resilience. Opportunities for improved nutrition for local communities will be sought under the value chain/interest groups plans. Trainings and capacity building for VO managers and members will pay specific attention to nutrition awareness, dietary diversity, recipe demonstration, WASH, food hygiene and production of nutrient rich commodities as part of value chain or through additional activities like kitchen gardens and identification of nutritionally superior indigenous foods. Collaboration will be sought with relevant ongoing programmes like PINS for nutrition education and supplementary assistance in target communities. Close synergy will be pursued with larger ADB investments in climate change adaptation infrastructure in terms of geographical targeting and leveraging of local knowledge in design and execution of ADB infrastructure.
54. **Sub-Component 1.2 Community and Value Chain Support Infrastructure:** The VO Umbrella Village Plan will provide the basis to identify and prioritize georeferenced community infrastructure investments while value chain/interest groups plans will be the basis for identification of value chain related infrastructure and equipment investments. Women priorities in community infrastructure will be separately identified and given additional weightage. Each VO will be eligible, on average, for a grant up to US\$ 50,000, to address (a) priority community/social infrastructure needs and to reduce climate vulnerability (drinking water, sanitation, irrigation, all weather road links, household solar systems etc.); (b) value chain support infrastructure needs (equipment and infrastructure for post-harvest management, product processing, aggregation, value addition and climate adaptation). Community infrastructure investments will be for schemes benefitting entire/large majority of village households while value chain infrastructure investments will be focused on producer/interest groups. A minimum of 30 percent funds will be allocated for Interest Groups processing and value addition infrastructure investments. Investments in an individual Union Council under this sub-component should not exceed the average allocation of US\$ 470,000 per Union Council. A checklist is provided in PIM for climate proofing of project funded infrastructure. Implementation arrangements are articulated in PIM. IPs will provide the required technical support for the design and competitive procurement of materials and services. The allocation per VO is a budget within which a VO may undertake one or more schemes, subject to cut-off limited prescribed in PIM, as long as they are justified as per their development roadmaps, equitable benefit for the community, economical per beneficiary cost and backed by feasible community operated O&M arrangements.
55. **Sub-Component 1.3 Access to Inclusive Finance:** The component objective is to expand the access to finance for the project's beneficiaries by integrating them into the formal financial sector. This helps to end beneficiaries' reliance on exploitative sources of informal credit, improve access to formal bank financing, establish their credit history, reduce their cost of production, utilize the advised levels and types of inputs to increase productivity, de-collateralize their produce from the traders/middlemen/dealers, and allows the beneficiaries to enter into higher priced sale contracts. It will open up avenues for additional services like crop insurance and digital banking services. As this upstream intervention progresses and the Project beneficiaries gain trust and confidence in the continuity of the availability of formal financial services, they will have an incentive to invest in value addition activities to further increase their incomes and bargaining power in their existing value chains.
56. SCRP's credit component is structured to benefit all segments of target beneficiaries. Credit services will be delivered by participating microfinance banks/institutions and commercial banks (selected at project start-up) operating a compliant Environment and Social Management System and portfolio risk management for financial return and sustainability (FI board approved policy, risk identification process, internal institutional capacity, reporting and monitoring). In addition, the FIs should have a well-defined grievance redress mechanism.
57. The main features of the subsidized credit facility include:
 - low cost / subsidized credit up to a maximum of two loan cycles with a maximum loan amount of US\$ 1,808 (PKR 500,000) per loan per beneficiary and an average loan amount of US\$ 1,579 per loan per beneficiary in local currency;

- beneficiaries will be charged 10% p.a. for the first loan and 20% p.a. for the second loan by the lending institution and the remaining part of interest will be paid as subsidy by the project. Following two cycles, the beneficiaries will have a credit history and account to access credit at the prevalent market rates from banks. Phasing out of subsidies over two loan cycles is done to prevent reliance or dependence on subsidies and the graduate borrowers into a standard commercial relationship with credit providers;
- the subsidized credit will be partially secured by a credit loss guarantee instrument;
- the partial credit loss guarantee will be on pari passu and declining basis with 75 per cent for Year 1 and 2, 50 per cent for Year 3, 35 per cent for Year 4, 25 per cent for Year 5 and Nil for Year 6;
- the purpose of the financing will be to allow smallholder farmers to purchase crop and livestock inputs and fisherfolk to purchase boats and the related equipment;
- the tenor of the loans offered to the beneficiaries will be 6 months and 1 year;
- the partner financial institutions will utilize their balance sheet funding to lend to the Project beneficiaries;
- core credit funds deployment by partner banks is estimated to be US\$ 53 million which will be revolved during the Project life equivalent to US\$ 149.619.

58. Further details are provided in the credit manual as part of the PIM.

59. Target segments for this sub-component will be smallholder farmers, tenants, sharecroppers, fisherfolk working on others' boats and young men and women supported by project in self-enterprises who wish to further scale them up. Main production activities and value chains to be financed include: vegetables (tomato, chilies, others), melons, paddy, wheat, small fishing boats and gear, off-shore aquaculture, small ruminants, dairy, and poultry.
60. Apart from credit, the partner banks will offer additional financial services including insurance, savings, remittances and payments. It is expected that during the 7-year project life, partner financial institutions will extend 100,000 loans to 55,000 Project beneficiaries. The Project will incur a cost of US\$ 195.62 per loan under the structure. The Project will encourage the lending financial institutions to cross-sell insurance products, including climate risk insurance, savings, remittances and payments to the borrowers. Banks will be required to obtain crop and livestock insurance for all loans disbursed for these two sub-sectors, as mandated by the State Bank of Pakistan. It will also be important for partner banks to collaborate with insurance companies to assess the impact of climate change and natural disasters and to design and offer climate risk insurance products, preferably parametric insurance to the beneficiaries.
61. Being an innovative approach with high level of co-financing expected from the private sector, the PMU and IFAD will closely monitor the roll out of the access to finance scheme. If issues are observed, the PMU will be assisted to initiate timely action to address the causative factors. Possible factors/challenges include: (i) ineffective roll out of the scheme by State Bank and/or by private sector banks and/or poor coverage of project target beneficiaries; (ii) beneficiaries' dissatisfaction with the level of subsidy being offered; and, (iii) type of loan products do not meet beneficiary needs or expectations. PMU and IFAD shall, for each of the eventuality: consider alternate implementation arrangements including RSPs for the implementation of credit component with any required review of level of subsidy, sustainability and exit strategy; consider the need to supplement the scheme with a partial credit loss guarantee instrument to cover the credit risk of beneficiary loans offered by the partner banks; review the subsidy levels including consideration of a mix of subsidy and matching grants; and, rejig the loan products and terms to be more responsive to beneficiary needs and expectations.
62. **Sub-Components 1.1 and 1.2 will be implemented with Institutional Support of Implementing Partners and government extension services:** This will consist of two elements – technical services provision for value chain planning and delivery, community and value chain support infrastructure delivery and credit provision facilitation and extension support from public sector entities identified in the village plans.
- **Implementing Partners:** Project will engage service of one or more professional implementing partners, with proven capacity and track record in organizing rural communities, value chain development planning, local development and poverty graduation. IPs, with assistance from field staff of the Agriculture Supply & Prices Department and Livestock and Fisheries Department, and under the supervision of PMU's sector specialists, will identify the target villages in three districts as per project selection criteria, organize the Villages, identify and organize Producer/Interest Groups and develop value chain plans for identified groups and commodities under a participatory approach. In addition to IP's own inhouse expertise, external service providers like FAO and research institutions will be engaged for training, capacity buildings and technical assistance. An initial target community and commodity profiling, demonstrating community eligibility in terms of project targeting criteria and value chain development potential, will be submitted by IPs to the PMU for approval.
 - **Extension Support Services:** The allocation is aimed at building capacities of the public sector extension services to provide demand-based agriculture, livestock and fisheries/aquaculture extension services to beneficiary VOs/interest groups as per their development plans. Engagement of service providers will be covered under performance-based MOU/MOAs between the PMU and service providers and detailed TOR and performance indicators. Such support is envisaged from Agriculture Supply & Prices Department and Livestock and Fisheries Department. The exact scope of work will emerge from the VOs and interest groups' development plans. Performance against MOU/As will be annually reviewed and placed before PSC with recommendations by PMU. The budget will cover some basic office equipment, mobility costs of staff, staff training, and project related operational overheads for field, Taluka and District level offices. Cost on community trainings and demonstrations for crops, high value products, processing aggregation, fisheries, aquaculture and transversal aspects is budgeted under sub-component 1.1.
 - Project may engage additional specialized extension and research service providers on need basis against specific TOR and outputs.
 - Public and private service providers engagement will be on the basis of proven capacity and experience with regards to supporting resilient VC and business opportunities. Their existing skills and know-how will be considered to deliver better support to targeted groups in the three districts.

63. **Sub-Component 1.4 Policy Support and Innovation Challenge Fund:** SCRП will support the provincial government in some key areas of project relevance for policy review and reform. These may include policy review and dialogue on tenancy and land tenure arrangements, regulations for housing land ownership rights and provision of civic services in coastal buffer zone communities, agriculture and rural development credit, agriculture marketing and service provision standards and enforcement mechanisms, Farmer organizations representation, climate adaptation, etc. Priority policy reform area will emerge from the first year of project implementation and the target communities' engagement. Only one policy area, directly relevant to project objectives, scope and target groups, would be identified in each year's AWPB during the first four years of implementation. A detailed proposal will be developed by PMU covering background, rationale for reform, intended outcome/product and estimated cost for the approval of PSC and IFAD prior review. The activities covered in each approved policy reform area will include short-term consultancies for research and review and development of proposals, workshops and roundtables with key stakeholders and preparation of required documentation.
64. **An Innovation Challenge Fund** will be administered by the PMU to identify innovative and cost-effective solutions for production, marketing, climate, environmental and nutritional challenges faced by target communities, either as standalone activity or as an input to an identified policy reform area. Some indicative areas for solution development under the challenge fund are: agriculture waste/residue management (e.g. rice straw is currently burned in the fields contributing to pollution and smog – how local poor/youth can convert it into remunerative products; improved storage, transport and packaging of food items, reducing post-harvest food losses, social marketing of nutritious food items, processing of banana plants residues; local formulation and cost effective production of feed for fish and shrimp, cost effective models of household latrines etc.). Solutions that contribute to improved nutrition, empower women or provide job opportunities to young people will be prioritized. Implementation cycle will involve: (i) Selection of critical themes relevant to project area and beneficiaries, project objectives and outcomes, smallholder economic development, climate change adaptation, improved nutrition etc. in consultation with IPs and relevant government agencies; (ii) Advertisement of theme, outlining objective and desired outcome/solution sought for technical and financial proposals; (iii) A PMU based broad based committee with concerned sectoral experts and academia for each theme to evaluate proposals and formulate recommendations; (iv) Approval of selected proposal by PSC and No Objection from IFAD; (v) TOR for successful bidder, workplan and milestones under an overall agreement including approved budget and payment schedules; (vi) Regular review of progress by PMU; (vii) Evaluation of final report and solution proffered by committee that approved the theme; (viii) Plan for approved solution's replication by PMU under the project. Fund administration and processes are detailed in PIM.
65. The challenge fund will be initiated sufficiently early in project implementation to allow possible scaling up of identified solutions via component 1 or 2. VOs will also be eligible to compete for this fund, as well as NGOs, public sector and private MSMEs jointly with VOs or farmers.
66. **Component 2. Economic and Social Inclusion of Disadvantaged Groups:** The objective of this component is to assist the rural landless poor to sustainably increase their incomes and get out of poverty trap and assist young women and men from poor families to learn skills for job market and/or self-enterprise. In line with Sindh Climate Change Policy (SCCP), the vulnerable groups (women, the poor, and young people) will become more resilient to hazards associated with climate change as a result of increased and diversified incomes and capacity. The component 2 consists of two sub-components: (i) Economic Graduation of Landless Poor, and (ii) Job Market Integration of youth. Target households for both interventions are those having poverty score 0-32 on NSER[45]. Each household will be profiled on the basis of templates already in vogue under NPGP to assess the best fit for them keeping in view the income generation opportunities in their vicinity and market demand. This will be captured in a Household Livelihood Improvement Plan (LIP). Diagnostic, Beneficiary targeting, interest groups formation and plans development will follow the process described in sub-component 1.1.
67. **Sub-Component 2.1 Economic Graduation of Landless Poor:** Target families will be provided with one or more income generating productive assets, for one or more members of the family, within budget ceiling of US\$ 500. Assessment will be carried out keeping the whole family in view rather than just the BISP beneficiary woman. The assets will be matched with overall household abilities, and operative livelihoods and market environment. Nature of the asset(s) will be such that it quickly adds to the income of the family. It can also be an asset or device that enables the family to take advantage of the income generation opportunities within the supported value chain e.g. a handheld reaper or mechanical tiller or a sheller or a processing, value addition or haulage equipment, equipment to collect organic waste and produce compost. In other cases, it can be an asset for off-farm income generating potential e.g. quality production of traditional crafts. Poor sharecropping families will be assisted to shift to leased land arrangements for greater profitability and economic independence. Around 41,900 households will be assisted. Per beneficiary costs will be reviewed annually by PSC to ensure that it remains compatible with the market situation.
68. **Sub-Component 2.2 Job Market Integration of Youth:** The sub-component is aimed at achieving job-market readiness for the young men and women (15 to 29 years of age)[46] from poor households through provision of vocational, technical and enterprise skills. Choice of vocations and technical skills will be guided by a rapid baseline Labour Market Survey by partner organization, in collaboration with STEVTA and availability of appropriate courses and training facilities within the project target area. The skills will be aimed at either finding remunerative salaried jobs or starting an income generating self-enterprise based on the learned skill. Some of these could be the skills and vocations linked to the supported value chains. Project support will cover both training costs and, for those opting for a self-enterprise, a start-up grant to cover cost for a starter set of implements, a rented space etc. STEVTA and other appropriate training service providers will be engaged for the purpose under performance-based MOU/As. The IPs and service providers will be required to facilitate the pass-outs in finding salaried jobs or starting own enterprise based on the learned skill. Project will also encourage group-based enterprises where young men and women of similar interest and skills will be assisted to start an enterprise linked to value chain and other local market opportunities. Project will incur, on average, a per beneficiary cost of US\$ 350 and total 47,600 youth will be assisted, of which at least 40 percent will be women. Based on experience in other IFAD projects (SPPAP/NPGP), actual cost per beneficiary is likely to be less in case of a beneficiary getting skills training only and finding a job while those opting for self-enterprise will cost more due to dual element of training cost including stipend and a start-up grant. The approach and per beneficiary costs will be

reviewed annually by PSC on the basis of experience and market situation.

69. **STEVTA Training Service Delivery:** STEVTA is the main technical and vocational training service provider in the project area. Experience in other projects (SPPAP, NPGP) has shown that most of the youth from target poor families do not meet the educational qualification requirements of regular TEVTA courses and need tailored training courses in terms of duration and curriculum. Such courses will need to be developed or adapted from ongoing courses in other projects like SPPAP and NPGP. Institutional support budget for TEVTA or private sector service providers is meant to enable service providers to develop need-based curriculum and supportive training materials and delivery mechanisms for that purpose. In particular, in case of female trainees, given their travel and stay constraints, some of the courses will have to be delivered in-situ for trainees from a cluster of villages. The allocated budget will meet those additional costs for arranging in-situ training and daily travel.
70. **Component 3. Project Management:** An autonomous and empowered Project Management Unit at Karachi, administratively linked to P&D Board, and reporting to Project Steering Committee, will be responsible for project planning, coordination, financing, monitoring and procurements. Chairman P&D Board will head the PSC and the rest of membership will be drawn from relevant line departments, Finance Department and civil society. Detailed list and TOR provided in PIM. A competitively selected Project Director will head the PMU, supported by adequate number of professional and technical support staff including finance, procurement, infrastructure, agri-business development, climate, gender, nutrition, and M&E.
71. A District Coordination Unit in each of the three target districts, headed by a competitively selected Project Coordinator and supported by a small team of professional and support staff, will be responsible for planning, coordination, monitoring and reporting of project activities based on Project's AWPB. Partner government implementing agencies will nominate dedicated activity managers at provincial and district levels, and specified field level staff, for project related activities. Scope of work of these agencies will emerge from VO and Interest Groups' plans and will be used as a basis for MOU/As between PMU and implementing agencies. Project will finance necessary operational and input budgets identified in the MOU/As for the work related to these agencies. Some other private and public sector and specialized agencies like FAO may emerge as implementing partners on the basis of VO development plans and technical and vocational training activities. PMU will engage them subject to detailed TOR and financial terms duly approved by PSC and subject to IFAD No Objection.
72. To avoid the risk of start-up delay, the core PMU staff (Project Director, Finance Manager and Procurement Manager) and the District Coordinators and Accounts Officers will be recruited three months prior to project effectiveness so as to complete the preparatory activities like preparation and approval of first year AWPB and Procurement Plan, identification and hiring of PMU and DCUs buildings, recruitment process initiation for support staff, orientation of public sector partners and procurement of IPs services.
73. **Component 4. Recovery from Climatic Calamities (RED Component):** Acknowledging the region's vulnerability to floods and water scarcity, the project includes a Response to Emergency and Disaster (RED) component. In case the Government of Sindh declares the project area (in total or part) affected by a climatic calamity like floods, cyclones, an earthquake or widespread pest attack (locusts), the project is authorised to trigger the RED Component. The RED component serves as an essential buffer, ensuring the project remains resilient and steadfast in achieving its objectives amidst sudden shocks in the coastal regions of Sindh. **Triggers and Process:** The trigger for the authorization will be the formal declaration by the Government of Sindh of the project area or part of it to be calamity-hit. After the formal declaration, the Government will send a formal request to IFAD indicating the amount that needs to be re-appropriated/authorized to be utilized for emergency response. Once received, IFAD will work closely with the project and the relevant government counterparts to define the specific actions.
74. **Total Authorized Amount:** The Government may request up to 15 percent of the total approved IFAD financing to be reallocated to the RED Component. The proposal shall identify the cost categories of the Financing Agreement that will be reduced, as applicable, as well as those that will be increased because of the reallocation.
75. **Project Benefits to each Target Group:** Following matrix describes the project benefits accruing to each target group:

Target Group	Project Interventions	Impact/Outcome
Smallholder Farmers (up to 16 acres)	<ul style="list-style-type: none"> - Extension support for Climate smart agriculture - Access to affordable finance for improved inputs - Value chain linkages - Production support and value addition infrastructure - Value chain and 4P development - Socio-economic support infrastructure (clean drinking water, irrigation, roads, sanitation etc.) 	<ul style="list-style-type: none"> - Improved production and productivity - Improved incomes - Climate resilience - Food security and improved nutrition and health - Linkages with markets, service providers and Empowerment

Tenants	<ul style="list-style-type: none"> - Secure tenancy arrangements - Extension support for Climate smart agriculture - Access to affordable finance - Value chain linkages - Production support and value addition infrastructure - Value chain and 4P development - Socio-economic support infrastructure (clean drinking water, irrigation, roads, sanitation etc.) 	<ul style="list-style-type: none"> - Improved production and productivity - Improved incomes - Climate resilience - Food security and improved nutrition and health - Linkages with markets, service providers and Empowerment
Sharecroppers	<ul style="list-style-type: none"> - Support and advocacy for land lease based production - Extension support for Climate smart agriculture - Access to affordable finance for land leasing and inputs - Value chain linkages - Production support and value addition infrastructure - Value chain and 4P development - Socio-economic support infrastructure (clean drinking water, irrigation, roads, sanitation etc.) 	<ul style="list-style-type: none"> - More equitable share in the output and income - Greater freedom in choice of crops, inputs and marketing - Improved incomes and climate resilience - Improved food security and nutrition - Linkages with competitive markets and improved returns of investments
Landless Poor and BISP beneficiary households	<ul style="list-style-type: none"> - Participation in VOs and interest groups and capacity building trainings in mainstreaming themes - Access to productive assets and income generating skills and credit - Household solar systems and toilets - Socio-economic support infrastructure (clean drinking water, irrigation, roads, sanitation etc.) 	<ul style="list-style-type: none"> - Voice and agency at community level and empowerment - Improved incomes through productive assets and skills - Improved nutrition and health
Fisherfolk	<ul style="list-style-type: none"> - Participation in VOs and interest groups and capacity building trainings in mainstreaming themes - Improved jetties and landing sites for fish catch - Off-shore aquaculture development - Cold chain strengthening for quality catch and other value chain support infrastructure and equipment - Access to finance for own boat purchase - Socio-economic support infrastructure (clean drinking water, irrigation, roads, sanitation etc.) 	<ul style="list-style-type: none"> - Voice and agency at community level and improved linkages with extension services - Enabling policy for settlement rights and access to development sources in buffer zone - Improved asset-base and incomes including alternate sources of incomes for improved climate resilience - Access to competitive markets for fair pricing - Independence from prevailing exploitative system

<p>Women</p>	<ul style="list-style-type: none"> - Participation in VOs and Interest Groups for voice and agency - Women priorities identified separately from men for infrastructure and value chain support - Access to clean drinking water, sanitation and labour saving equipments - Participation in capacity building on mainstreaming themes - Forty percent project beneficiaries to be women - Access to vocational and technical trainings, productive assets and start-up grants for self-enterprise 	<ul style="list-style-type: none"> - Voice and agency at community level and household level decisions - Improved asset-base and incomes including alternate sources of incomes - Improved health and nutrition outcomes - Reduced drudgery on water collection, crops harvesting etc.
<p>Young men and women from Poor Families</p>	<ul style="list-style-type: none"> - Participation in VOs and Interest Groups for voice and agency - Access to vocational and technical trainings, productive assets and start-up grants for self-enterprise - Access to affordable finance - Youth interest groups for off-farm enterprise development and on-farm value addition and marketing services 	<ul style="list-style-type: none"> - Voice and agency in community and household decision-making - Better employable skills and incomes - Strengthened service provision at community level

E. Theory of Change

76. The Theory of Change of SCRP is underpinned by the recognition that rural poor in the target districts are a heterogeneous group and consist of smallholder farmers, tenants/sharecroppers, landless daily wagers and fisher folk. Women and youth are particularly disadvantaged. A one-size-fits-all approach and set of interventions cannot work for all and would require a nuanced and flexible menu of interventions to address the underlying causes of each group's poverty in a sustainable manner. Intersecting vulnerabilities of both women and men (young and old) also need to be captured and a twin-track approach combining mainstreaming strategies and targeted support will be adopted to address the needs of the specific groups.
77. The Theory of Change is based on the premise that **IF** smallholder farmers/tenants/sharecroppers are organized and capacitated to adopt economically attractive 'climate smart agriculture as a business' to produce commercially attractive quantities for value chain participation, and the small fisherfolk are organized and provided means to operate free from current exploitative system, and **IF** disadvantaged groups such as women and young people from the target households are provided with market demanded remunerative skills and an enabling environment for employment/self-employment along the value chains and rural market, and **IF** the adaptive capacity and nutrition status of target groups is improved through enhanced incomes, access to water and sanitation and relevant knowledge and practices, and **IF** there is a supportive environment for livelihoods development in the target area including affordable financial services and large complementary ADB infrastructure investments, **THEN** a well-rounded impact can be achieved in terms of increased incomes, improved resilience, women and youth empowerment, improved food security and nutrition and reduced rural poverty.
78. The ToC impact and outcomes will be achieved through three interconnected pathways for both agriculture dependent and fisheries dependent communities.
79. **Pathway 1:** An incremental and community driven process whereby smallholder farmers and fisherfolk are organized, to initially improve existing production and productivity up to true potential through adoption of climate smart agriculture and sustainable fishing practices, achieve economies of scale through aggregation, and subsequently, with improved knowledge and capacities, graduate to viable market-oriented and climate change adapted value chains of higher value commodities. Access to finance and insurance, with tailored products, is facilitated. Identified support infrastructure and processing/value addition deficits are addressed through beneficiary-centred prioritization and execution. A strengthened extension support is provided along with access to climate adapted techniques, modern production technologies, ecosystem-friendly practices and certified inputs. Professional technical support for value chain development and marketing together with a strong social mobilization element underpins the entire cycle.
80. Gender disparities and social norms which limit women's participation are addressed through greater access to remunerative activities, participatory forums, and increased female-controlled income and sensitization sessions on intra-household shared decision making. Labour-saving technologies linked to domestic water use are promoted to tackle women's time poverty and free up time to perform productive tasks and participate in decision-making processes. Increased decision-making power of women has a positive impact on household expenditures on health and more diversified diets. Social and behaviour change activities towards improving target groups' knowledge and practices on food choices (in production, purchase and consumption), food preparation, processing and conservation, healthy diets along with good hygiene and sanitation practices contribute to improved nutrition at family level.
81. **Pathway 2:** Disadvantaged young people and women from the target households are enabled to understand and acquire local market-demanded technical and vocational skills and enterprise development training, based on local labour market analysis, coupled with start-up business finance and productive assets. They also take advantage of employment, enterprise and service provision opportunities generated by the developing value chains in processing, value addition, renewable energy, digital marketing, logistics, green services, and wider employment market. Ultra-poor landless households are assisted in acquiring productive assets and skills for sustainable increase in incomes and gradually develop capacity to access formal sources of financing for further expansion of production and incomes.
82. **Pathway 3:** Policy support to the government creates an enabling environment that offers improved access to services and productive resources (soil and land, water, knowledge, product processing, finance) and enhances climate resilience. Strong linkages with ADB-funded infrastructure and nature-based solutions for climate risk reduction, WB-funded STAR project, Emergency Housing Reconstruction Project, GoS nutrition support programme "Sehatmand Sindh" and GoS Union Council Development Planning improve coastal resilience and provide enabling conditions for inclusive and resilient livelihoods development. A Challenge Fund pulls creative energy of academia, research institutions, civil society and private sector to develop innovative solutions for the key challenges of production, marketing, value addition, environment, climate, nutrition, women and youth empowerment.
83. Key assumptions for these impact pathways: Updated BISP data on poverty and transparent targeting process implemented; households are willing to participate in project activities; market-based and climate-adapted business plans developed under VOs and subsidiary interest groups and 4Ps; beneficiaries willing to use financial services adapted to the needs of beneficiaries, and selection of competent services providers and policy reform process facilitated by Planning & Development Board.

F. Alignment, ownership and partnerships

84. SCRP is aligned with IFAD’s Strategic Framework 2016-2025 and responds to IFAD12 and IFAD13 priorities. SCRP also contributes to attainment of 7 SDGs^[47]. The project directly contributes to the two COSOP strategic objectives of “Enhancing productivity and profitability of smallholder farmers through climate resilient diversification and an agribusiness approach”, and “Fostering inclusion of the landless and ultra-poor households through an economic graduation approach”. It is also aligned with nationally-owned United Nations Sustainable Development Cooperation Framework (UNSDCF) for Pakistan 2023–2027^[48].
85. SCRP is consistent with the National Agricultural Policy (2019-2024), which aims to ensure sector growth of 5 percent, including the livestock sector, and aims to increase agriculture public expenditures to at least 10 percent of total expenditures. SCRP is also aligned with GoP’s strategy to achieve aquaculture expansion and to “increase national fish supply based on sustainable production and improved marketing of aquatic products”. SCRP is aligned with the Sindh Livestock and Fisheries Enterprise Development Policy draft^[49], which aims at the transformation of the livestock and fisheries sector from conventional towards market-oriented farming by 2025.
86. SCRP fits neatly in Sindh Poverty Reduction Strategy 2022 which calls for a participatory community driven approach to address the key challenges of survival (water, sanitation, nutrition, shelter and health) and poverty graduation (literacy, vocational skills, and enterprise development). The project is aligned with Sindh Youth and Gender Equality and Women Empowerment policies. SCRP will also complement Sindh Government’s Accelerated Action Plan for Reduction of Stunting and Malnutrition and its appointed taskforce to carry it forward^[50].
87. SCRP will complement other ongoing government and IFIs/donor-financed development initiatives in the three target districts. Apart from close integration with ADB parallel-financed activities, complementarities will be built with World Bank-funded [Sindh Flood Emergency Rehabilitation Project](#) (\$500 million), [Sindh Floods Emergency Housing Reconstruction Project](#) (\$500 million), [Sindh Water and Agriculture Transformation Project](#) (\$292 million), the EU-financed PAIDAR project aimed at promoting micro-enterprises and IFAD’s own National Poverty Graduation Programme covering 23 Union Councils in the three districts. Linkages will also be developed with GoS-financed rural growth centers as one-stop service centers for agriculture extension and input supplies.
88. SCRP fits very well with the National Adaptation Plan adopted in 2023, in particular in addressing the agriculture-water nexus and Natural capital (seen as the most critical challenges for adaptation). It also aligns with the NDC (2021) that emphasize the role of ecosystem restoration and promote climate smart inputs and management practices in agriculture and livestock management, with emphasis on gender, youth and social inclusion.
89. Implementation oversight by Planning & Development Board will ensure alignment and complementarity with other development interventions in the target districts. There are opportunities for additional partnerships including Green Climate Fund supported project “Transforming the Indus Basin with Climate Resilient Agriculture and Water Management” 2019-2026.

G. Costs, benefits and financing

a. Project costs

90. Total project cost is estimated at US\$ 163.5 million, to be financed through: (i) an IFAD loan in the amount of US\$ 60.0 million, (ii) a financing gap of US\$ 40 million potentially to be financed by IFAD with the 2025-2027 PBAS allocation; (iii) Government contribution in the amount of US\$ 6.7 million; (iv) beneficiary contribution of approximately US\$ 2.8 million; and (v) 4P private sector and commercial Banking sector contribution in the amount of US\$ 0.93 and 53.1 million respectively. The Table 1 below reflects the project costs by component.

91. **Table 1: Programme/project costs by component (and sub-components) and financier**

(Thousands of United States dollars)

Islamic Republic of Pakistan Sindh Coastal Resilience Project Components by Financiers	(US\$ '000)							
	IFAD Loan	GoS	Financing Gap	4P		Beneficiary Contribution	Commercial Banking Sector	Total
				Private	Scetor			
				Amount	Amount			
Amount	Amount	Amount	Amount	Amount	Amount	Amount		
A. Transformation of Coastal and Rural Incomes								
1. Organization, Planning & Training	2,863	113	551	925	-	-	-	4,452
2. Community and Value Chain Support Infrastructure	13,069	1,449	17,204	-	2,756	-	-	34,477
3. Financial Inclusion	15,409	-	6,721	-	-	53,132	-	75,262
4. Institutional Support	1,325	300	372	-	-	-	-	1,997
5. Challenge fund and policy support	1,343	653	1,472	-	-	-	-	3,469
Subtotal	34,008	2,515	26,321	925	2,756	53,132	-	119,657
B. Economic and Social Inclusion								
Economic Graduation of Landless Poor	9,463	1,393	6,885	-	-	-	-	17,741
Job Market Integration of Youth	10,135	-	4,708	-	-	-	-	14,843
Intiutional Support to STEVTA	1,227	-	457	-	-	-	-	1,684
Subtotal	20,825	1,393	12,050	-	-	-	-	34,268
C. Project Management & Implementation Support								
Project Management	2,628	2,156	388	-	-	-	-	5,172
Implementing Partners	2,540	667	1,241	-	-	-	-	4,448
Subtotal	5,167	2,823	1,630	-	-	-	-	9,619
Total PROJECT COSTS	60,000	6,731	40,000	925	2,756	53,132	-	163,544

92. Table 2: Programme/project costs by expenditure category and financier

(Thousands of United States dollars)

Islamic Republic of Pakistan Sindh Coastal Resilience Project Project Cost By Expenditure Category and Financiers	(US\$ '000)							
	IFAD Loan	GoS	Financing Gap	4P		Beneficiary Contribution	Commercial Banking Sector	Total
				Private	Scetor			
				Amount	Amount			
Amount	Amount	Amount	Amount	Amount	Amount	Amount		
1. Civil Works/ Community Infrastructures	13,069	1,449	17,204	-	2,756	-	-	34,477
2. Vehicles	304	54	-	-	-	-	-	357
3. Computer and Equipment	95	17	-	-	-	-	-	112
4. Credit	15,378	-	6,721	-	-	-	-	22,098
5. Technical Assistance, Trainings, Workshops and Studies	12,141	798	6,370	-	-	-	-	19,310
6. Grants and Subsidies	13,497	1,496	7,889	925	-	-	-	23,808
7. Private Sector	-	-	-	-	-	53,132	-	53,132
8. Salaries and Allowances	1,086	1,051	199	-	-	-	-	2,335
9. Operating Costs	4,431	1,867	1,617	-	-	-	-	7,915
Total PROJECT COSTS	60,000	6,731	40,000	925	2,756	53,132	-	163,544

93. Table 3: Programme/project costs by component and year (Thousands of United States dollars)

Islamic Republic of Pakistan Sindh Coastal Resilience Project Project Components by Year -- Totals Including Contingencies	Totals Including Contingencies (US\$ '000)							
	2025	2026	2027	2028	2029	2030	2031	Total
A. Transformation of Income Opportunities								
1. Organization, Planning & Training	53	283	662	859	874	860	860	4 452
2. Community and Value Chain Support Infrastructure	999	3 317	3 787	8 341	7 775	5 767	4 491	34 477
3. Financial Inclusion	8 483	6 795	9 283	18 030	13 928	18 743	-	75 262
4. Institutional Support	653	237	231	224	220	216	216	1 997
5. Challenge fund and policy support	200	435	708	1 096	809	221	-	3 469
Subtotal	10 389	11 068	14 670	28 549	23 606	25 808	5 568	119 657
B. Economic and Social Inclusion								
Economic Graduation of Landless Poor	1 520	2 377	2 898	3 069	3 127	2 692	2 058	17 741
Job Market Integration of Youth	1 050	2 031	1 888	3 127	3 099	2 962	685	14 843
Intiutional Support to STEVTA	807	54	87	541	82	80	33	1 684
Subtotal	3 377	4 462	4 873	6 737	6 309	5 734	2 776	34 268
C. Project Management & Implementation Support								
Project Management	1 126	652	662	665	671	683	713	5 172
Implementing Partners	288	484	755	877	689	678	677	4 448
Subtotal	1 414	1 136	1 417	1 541	1 360	1 361	1 390	9 619
Total PROJECT COSTS	15 179	16 665	20 961	36 828	31 275	32 903	9 734	163 544

b. Project financing/co-financing strategy and plan

94. IFAD will make available a loan of US\$ 60 million on blend terms for implementation of SCRP. The financing gap of US\$ 40 million will be addressed in next PBAS or through co-financing. IFAD financing is for the Livelihoods development, in parallel to, but closely aligned with, the ADB financing of US\$ 165 million (US\$ 125 million loan, US\$ 40 million Green Climate Fund resources) to finance larger climate mitigation grey and green infrastructure investments for improved drainage, flood protection, water management efficiency improvement and mangroves rehabilitation. Government of Sindh will provide co-financing of US\$ 6.7 million to defray the local taxes and parts of operational costs. Beneficiaries' contribution is US\$ 2.7 million, mostly in kind, for the community infrastructure component. Private banking sector is expected to leverage US\$ 53.1 million, against IFAD-financed credit subsidies totalling around US\$ 22 million. In addition, private sector partners in 4Ps are anticipated to contribute US\$ 0.93 million.

c. Disbursement

95. A parallel financing framework will be applied for the project implementation arrangement including for disbursement. This entails that ADB and IFAD's disbursement modalities are distinct and not combined.
- The SCRP PMU shall establish a Designated Assignment Account in the National Bank of Pakistan (NBP), Karachi to receive and use IFAD's Loan. As per Federal Government's instructions, the NBP is the designated bank for handling all transactions of assignment accounts. The State Bank of Pakistan (SBP)—which maintains the accounts of foreign aid for Pakistan, shall receive funds from IFAD in USD, convert it at the prevalent exchange rate into local currency, debit the national account for loan, and credit the project's Designated Account accordingly. The project account shall show debits, credits and balance in PKR along with USD equivalent.
- The Revolving Fund modality under the report-based disbursements system will be the mechanism used for withdrawing funds from IFAD financings. Interim Financial Reports (IFRs) package will be used as a basis of submission of withdrawal applications to IFAD. The IFRs package and requirement will be included in the Financial Management and Financial Control Letter (FMFCL) and the PIM during the implementation period. The first advance should be equal to or less than the forecast amount of IFAD financed expenditures approved in the Annual Work Plan and Budget (AWPB) for the period of six months. Further advances to the Designated Account will be made for the next reporting period based on the AWPB or expenditures forecast.
- Each quarter the PMU shall submit the IFRs package (using the templates included in the FMFCL and the PIM) to report on the financial performance and to justify the specified percentages of the withdrawn advances as indicated in the FMFCL.
- The government's share in financing comprises counterpart funding for payment of applicable taxes and other in-kind contributions as well as part of project management costs (US\$ 5.2 million). PMU shall open a separate Assignment Account to receive and use government counterpart funds (cash) for taxes and project management. The annual requirement of counterpart funds shall be reflected in the project's AWPB and provincial budget. The accounting system shall record government financing separately.

d. Summary of benefits and economic analysis

96. Main benefits accruing from the project include: (i) increased production and productivity for smallholder farmers and fisherfolk through organization, training, adoption of climate smart agriculture practices, technology infusion, access to affordable financial services and linkages with private sector under 4Ps, resulting in increased incomes; (ii) improved community socio-economic infrastructure including access roads, drinking water, irrigation, drainage, sanitation and solar energy resulting in better and cost effective access to markets, women reduction of drudgery in water collection, improvement sanitary environment and reduced disease burden, more secure access to water, improved drainage making more land available for cultivation and solar energy creating opportunities for productive activities; (iii) productive asset provision to ultra-poor households creating sustainable source of enhanced income with spill over impact on improved nutrition and social and economic empowerment; (iv) employment and enterprise development opportunities for the male and female youth resulting in sustainable incomes for their families, financial and social inclusion and empowerment. Other benefits include better climate resilience, improved nutrition, women and gender empowerment and financial inclusion of the currently un-bankable rural poor.
97. The social and environmental benefits expected from the Project are: (i) enhanced opportunities for women/youth to engage in profitable agricultural, livestock and fishing activities. This will result from gender and youth sensitive development approaches introduced by the project to engage them in tailored vocational and small enterprises interventions that are relevant in the local context and offer high promise of enhanced incomes and job market participation; (ii) introduction of climate smart agriculture production practices with a value chain approach and facilitated access to inclusive financial services and competitive markets that would be more resilient to climate change impacts and conserve the natural resource base; (iii) provision of climate proofed social, economic and value chain infrastructure that would enhance quality of life, improve health and nutrition status of the beneficiaries and contribute to incomes.
98. The financial analysis of project shows viability of the proposed project as evident from its overall Financial Internal Rate of Return (FIRR) of 27.97%. The Net Present Value (NPV) of the proposed project over 20 years' period has been noted to be US\$ 73.05 million. The FIRR and the NPV are based on financial prices of the project.
99. The overall economic internal rate of return (EIRR) of the project is estimated at 22.65%. The economic net present value (NPV) of the project net benefit stream, discounted at 17.03%, was calculated to be US\$ 49.54 million.
100. Three major risks were identified – (i) security; (ii) financial management capacity, and (iii) climate-risks – as potentially leading to underperformance for the achievement of full-scale project benefits, delay in realization of benefits and reduced effectiveness. Under various risk scenarios, the analysis reveals acceptable values of both NPV and EIRR, and thus the proposed investment is still feasible under these adverse scenarios.

e. Exit Strategy and Sustainability

101. SCRP's Theory of Change is based on the premise that incomes of rural smallholder farmers, tenants, sharecroppers, and fisherfolk can be sustainably improved through adoption of climate adapted practices, restored and strengthened ecosystem services, market driven commercialization pursued by organized and capacitated groups of farmers and backed by a strengthened and sustainable system of quality input supply, including extension support, credit services, grey and green infrastructure provision and private sector linkages. The landless poor and young men and women from poor families are trained and provided productive assets and on-farm and off-farm employment and self-enterprise opportunities to earn sustainable incomes and add to their families' economic well-being. The sustainability of project's interventions beyond the project life is anchored in the following project approach and interventions:
- Commercially viable organizations of smallholder agriculturists and fisherfolk, with own financial and management capacity, pursuing a business plan that balances the equation among landowners, smallholder/tenants and middlemen and links beneficiaries with markets and private sector in win-win profitable relationships;
 - Community ownership of all community and value chain infrastructure and communities assisted to establish sustainable O&M arrangements including trained village activists and user fees;
 - Capacitated public and private sector service providers, including technical and financial services providers, oriented towards a demand-based service provision to the smallholder farmer and fisherfolk organizations minimizing reliance on exploitative middlemen based financial and input service provision;
 - Youth, including women, provided remunerative skills to meet the technical human resource needs to farmer and fisherfolk organizations in management, marketing and service provision for sustained operations of organizations and income generation for the youth;
 - Climate change adaptation and climate change resilience improved through introduction of appropriate crops, and cropping cycles, and climate effect mitigation through climate proofed large (ADB) and community-based infrastructure and restored ecosystem;
 - Gender, nutrition, youth and climate change concerns mainstreamed into all facets of value chain planning, community training and knowledge building and linkages with other regular government programmes working in these areas;
 - Government assisted to improve the regulatory environment for tenancy and land tenure arrangements, housing land ownership rights and provision of civic services in coastal buffer zone communities, agriculture and rural development credit, agriculture marketing and service provision standards and enforcement mechanisms, ecosystem restoration and protection, and climate adaptation.
 - Financial inclusion of project beneficiaries with established credit history and partner financial institutions continue to facilitate access for farmers, fisher folk and landless poor to formal sources of affordable credit beyond project life.

3. Risks

H. Project risks and mitigation measures

102. **Macro-Economic Stability:** After a brief fillip post COVID-19 when GDP growth rate exceeded 6 percent with considerable growth in exports and improved current account balances, Pakistan’s economy has deteriorated over the last couple of years. Recurrent shortages of electricity and natural gas have affected the industrial productivity. Devastating floods of 2022, resulting in around US\$ 16 billion losses in infrastructure, agriculture, housing stock and livestock has further damaged prospects for economic recovery. Persistent adverse balance of trade, continuing current account deficit, heightened inflationary pressure and rapid devaluation of currency has led to an IMF bail-out package of US\$ 7.2 billion. While a coalition government is taking shape at Federal level following February 2024 elections, there is a continuity of political set-up in Sindh where the previous ruling party has again come into power. The outgoing caretaker set-up had initiated various stabilization measures including caps on development expenditure and widening of tax net for improved revenues. State Bank has maintained a high policy rate at 22 percent to control the persistent inflationary pressure. There is a likelihood that the new government will yet again approach IMF for a new assistance programme.
103. **Political Stability:** The political system remained in transition for the last 24 months under a caretaker set-up. Following February 2024 election, none of the major political parties secured clear majority leading to the number 2 and 3 parties, along with smaller parties, forming a coalition government at the centre. In Sindh, the previous party in power has come with a clear majority again which promises continuity. The political changes notwithstanding, sovereign agreements on IFI loans and projects are respected and implemented by the permanent bureaucratic system that is by and large immune to political vagaries and changes.
104. **Country Fiduciary Risk:** The country’s inherent fiduciary risk rating is “high”. Pakistan has a score of 27/100 and is ranked 140/180 in the 2022 Corruption Perception Index released by Transparency International. One key concern is a weakening of anti-corruption institutions or, in some cases, absence of an agency to coordinate action against corruption. Government is taking a number of measures to counter the challenge including World Bank supported Public Expenditure and Financial Accountability Project (PEFA) to bring greater transparency and accountability in provincial public expenditures.
105. **Operational and Implementation Risks:** The operational and implementation risks are listed in the following table along with mitigation measures built in the design:

Risk	Risk Level	Mitigation Measures
Weak Management Capacities and high staff turnover: There are pronounced staff capacity issues in the province and projects are prone to high staff turnover, especially those assigned from government departments.	Medium	Core PMU and DCU staff will be recruited through competitive process and paid market-based salaries to ensure staff competence and stability. Learning from ongoing IFI projects, capable private sector service providers are planned for critical project interventions like organizing the farmers and delivery of value chain development inputs and implementation of community level infrastructure through well-established community driven processes.
Financial Management: Financial Management risk at design is high on the back of high country, entity, and project specific risks. Mitigating measures have been developed and key among these would be enshrined in the loan covenants.	High	The PMU will be based in Karachi where availability of better qualified staff is more likely and recruitment will be through a competitive process. There would be clear manuals and guidelines that are tailored to SCRP peculiarities. A suitable accounting system would be procured at provincial and district level. Internal and external audit arrangements would be in place for assurance purposes.
Procurement: Procurements are generally prone to delays and issues of value for money and transparency have been encountered.	Medium	Adequate competent procurement personnel will be ensured in the PMU and trained in IFAD procurement guidelines and processes.
Start-up Delays: Most IFAD and other IFI supported projects have experienced considerable start-up delays.	Medium	Delays in recruitment of key PMU staff has cascade effect on rest of project implementation. Learning from past Mansehra Village Support Project experience, key project staff will be recruited by Government at least three months prior to loan effectiveness for timely completion of preparatory activities. Costs thereof will be eligible for retroactive financing.

<p>Elite Capture and fund leakage: Skewed landownership patterns in target districts and feudal structures pose the risk of elite capture of project resources.</p>	<p>Medium</p>	<p>Smallholder and poverty-linked geographic and beneficiary targeting criteria and use of poverty score cards under components one and two, engagement of capable implementation partners and participatory community centered development approach, twice a year comprehensive IFAD and ADB supervision missions will ensure that project resources reach only the intended target groups.</p>
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106. **Financial management risk assessment.** Pakistan’s Open Budget Index (OBI) ranking is 60 out of 120 countries and has consistently maintained low scores due to very limited public participation in the budgetary process (score of 9/100). Parliamentary budget oversight is also low (39/100) though audit oversight by the Auditor General Office (score of 61 out of 100) is rated adequate.
107. PEFA for Sindh (2020) analysed provincial performance against the 2013 assessment baseline. While some improvements were noticed under the seven pillars and 33 indicators, many problem areas persisted. These included, unpredictability of federal transfers, weak linkages between policy and budgeting, inefficient use of development funds, data integrity issues, manual and IT based accounting system running in parallel, weak internal audit, and delays in submission of audit reports to the legislature.
108. Lessons learned from previous projects in the country include (1) operationalize the PMU and ensure adequate and timely recruitment of staff; (2) complete AWPB and PIM before disbursement, ensure PIM includes clear guidelines that are consistent with the project design and activities; (3) procure an accounting software that meets the project needs at start-up phase; (4) Implement internal audit function or similar internal mechanism through compliance verification by AGP or through WB/GoP established internal audit organ; (5) early coordination with the Auditor General of Pakistan for timely delivery of the audit reports and timely settlement of audit findings.
109. **Financial management risk assessment.** Pakistan’s Open Budget Index (OBI) ranking is 60 out of 120 countries and has consistently maintained low scores due to very limited public participation in the budgetary process (score of 9/100). Parliamentary budget oversight is also low (39/100) though audit oversight by the Auditor General Office (score of 61 out of 100) is rated adequate.
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I. Environment and Social category

112. The three target coastal districts have been facing environmental degradation due to poor drainage, soil salinization and shortage of surface water supplies from the Indus river. There are no indigenous people in the project area while project activities will not cause any physical or economic relocation of the beneficiary communities. The Project physical interventions like drinking water supply schemes, small rural roads, community irrigation schemes, water storage ponds and home solar power systems will have limited environmental impacts. The linked ADB larger investments in green and grey investments will help restore ecosystem services and improve the water cycle. Therefore, project is classified as “moderate” risk for the environmental and social category.
113. The Project acknowledges the small risks associated with the proposed activities and foresees designs and implementation mechanism with integrated mitigation measures at place. The design and construction will ensure environmental protection by providing wastewater disposal facilities, sustainable operation and maintenance measures and introduction of salinity resistant crops and plants. Drinking water supply schemes will be solar powered while there will be no activities in the protected areas. PIM will provide details about schemes selection and implementation while risks identified in IPRM will be addressed through stringent measures as given therein. Detailed grievance redress mechanism has been provided.
114. SCRP has been designed in accordance with relevant environmental and social laws. All applicable SECAP standards in biodiversity and conservation, resource efficiency and pollution prevention, cultural heritage, labour and working conditions, community health and safety and financial intermediaries will be enforced. Accordingly, ESCMP, stakeholders’ engagement plan (SEP), Grievance Redress Mechanism (GRM) have been developed to address the necessary requirements as described in Annex 5.

J. Climate Risk classification

115. The climate risk category of the project has been determined as “substantial” because all the three target districts have been experiencing floods, cyclones, droughts and heat waves during the past few decades that have caused serious agricultural and economic losses to the concerned population. The poor and vulnerable rural populations are mostly relying on agriculture and fisheries which are dependent on weather patterns and climatic events. Similarly, adaptive capacities of target populations are relatively low and, therefore, the climate risk is deemed substantial.
116. Smallholder farmers and target groups display a moderate awareness of climate risks and related adaptive and mitigation measures. They are sensitive to climate change impacts because their livelihoods are dependent on earnings from agriculture, livestock and fisheries which are directly dependent on weather patterns and climatic events. While the project expects to build the resilience of target populations to withstand the adversities of climate and other economic shocks, at baseline, low adaptive capacities characterize these populations.
117. Relevant climate change related policies and strategies will be followed to mitigate the impacts of climate change. SCRP has incorporated measures for climate resilience in agriculture and fisheries sectors. Climate smart agriculture including efficient use of water, drought resistant crops, aquaculture, and reduction of post-harvest losses have been planned for the implementation phase. The project will include capacity building activities for government institutions, communities and interest groups on targeted climate adaptation options as given in Annex 5.

4. Implementation

K. Organizational Framework

a. Project management and coordination

118. The **Economic Affairs Division**, of the **Ministry of Economic Affairs**, the government designated agency for coordination of foreign assistance, will be the IFAD financing coordination agency at Federal level.
119. A joint **Provincial Steering Committee**, for parallel financed ADB and IFAD components of SCRP, headed by Chairman P&D Board, will be responsible for all aspects related to policy, development coordination, project budget appropriations and accountability for performance/results. The PSC will ensure close complementarity and synergies between ADB financed larger infrastructure and IFAD financed livelihoods activities. Rest of the membership will be heads of relevant provincial departments responsible for ADB financed and IFAD financed interventions. Membership and TOR included in PIM.
120. **Planning & Development Board, Government of Sindh** will be the lead project execution agency and administrative department for the SCRP Project Management Unit. P&D Board will be responsible for timely completion of Project PC-I for internal government approval processes as well as timely recruitment of PMU and DCU staff to ensure that project implementation starts as per agreed timelines.
121. **Project Management Unit:** A Project Management Unit at Karachi, headed by a competitively selected Project Director of appropriate seniority and experience, will be responsible for project planning, coordination, financial management, gender & nutrition, agri-business, procurement and M&E of project activities. PD will be assisted in his functions by competitively recruited professional and technical staff for all facets of project management.
122. **District Coordination Units:** A District Coordination Unit will be established in each of the three target districts to undertake planning, coordination and M&E of the project activities in their respective districts. The DCU will be headed by a District Project Coordinator and will have a small technical team and support staff. See PIM for staffing and TOR.
123. **Implementing Partners:** The Project will contract implementing partners with competencies in agriculture and fisheries value chain development, participatory development approaches and poverty graduation. Other implementing partners include Agriculture Supply & Prices Department, Livestock and Fisheries Department, Sindh TEVTA, external specialized agencies like FAO and private sector technical and vocational training institutions, private sector agri-business entities, climate smart agriculture and aquaculture service providers, and agri-credit service providers.
124. **Integration and Complementarity with ADB investments:** ADB-supported SCRP interventions, under a sector loan, are aimed at providing key large drainage, water resources and flood management and green infrastructures for protection of communities from climate change vagaries, in terms of improved drainage systems as well as mangrove and inland forest restoration. The geographic alignment of IFAD and ADB investments will be ensured through the common Provincial Steering Committee and project level Coordination Committee consisting of IFAD PMU and ADB PMIUs in Irrigation and Forestry Departments. IFAD investments will leverage local community knowledge and needs in the selection of priority ADB investments, their design and coverage contours and longer-term community ownership and engagement in maintenance and protection of infrastructure and green investments. IFAD supported community level infrastructure investments will be aligned with larger ADB investments to maximize the impact at farm and community level. The opportunities for wage labour and skill acquisition at ADB investments will be proactively exploited for the benefit of poor and landless members and youth in IFAD supported VOs.

b. Financial Management, Procurement and Governance

125. The country financial management inherent risk is “high” due to issues related to: delays in staff recruitments; delays in AWPB formulation and submission; weak internal controls; weak FM capacities in partner organizations; use of inappropriate accounting software, and; delays in conduct of annual audits, submission of annual audit reports and timely resolution of audit observations. Financial management arrangements and staffing in SCRPs consider these concerns.
126. **Staffing:** PMU will have an adequately staffed FM section. PMU location in Karachi will provide access to relatively more competent pool of FM staff. Finance Manager will be competitively recruited on market-based salary and selection will require a No Objection from IFAD. Finance Manager will be assisted in his functions by competitively recruited Accounts Officer, a Budget & Finance Officer and two Accounts Assistants. Project will have largely centralized FM arrangements with all major procurements and service provision payments managed at PMU level. Each DCU will have one Accounts Assistant as the DCUs will manage only small operational budgets for the running of their offices. TOR for FM Section staff are provided in PIM.
127. **Annual Work Plans and Budgets:** All project activities will be guided by Annual Workplans and Budgets, based on PDR and Financing Agreement and duly approved by PSC and IFAD No Objection. AWPB will be prepared by PMU following a consultative process with all implementing partners and DCUs. Plan preparation will follow provincial government budget preparation schedules to ensure that plan budget is reflected in the government Annual Development Plan, reflecting IFAD and government counterpart allocations. For ease of planning and monitoring, AWPB for each component will be further elaborated in quarterly physical and financial targets which shall become the basis for monthly and quarterly planning and progress reviews. PSC will conduct a mid-year review to assess progress against annual plan and approve any required adjustments, revisions and remedial measures.
128. **Flow of Funds:** Project will have two sources of funds - IFAD and Government of Sindh. PMU will maintain separate assignment accounts in National Bank of Pakistan for each of the financiers. PD and Finance Manager will be the cosignatories for the management of bank accounts and disbursements. Apart from meeting PMU and DCUs own operational expenses, most of the investment funds will be expended through implementing partners. All implementing partners will maintain dedicated project accounts to facilitate tracking of funds disbursed and utilized. The flow of funds to IPs will be further elaborated in PIM and will be reflected in their contracts. Flow of funds to other public sector agencies will be based on the activities and expenses agreed in the MOU/As. Based on MOU/As and AWPB targets and phasing, PMU may provide initial one quarter advance to IPs. Subsequent releases will be on the basis of submission of account and invoices against the advance, adjustment of any unspent advance, and release of next tranche. Funds for VO related activities will be transferred to IPs on the pattern already in vogue in on-going IFAD projects in Pakistan and on the basis of VO and interest groups’ approved plans. IPs will be responsible for rendering of quarterly financial statements of own and VOs expenses, to the DCU and PMU. PMU Finance Manager will cause inspection of VOs and IPs’ accounts at least once every six months. Detailed financial management framework for PMU and IPs is provided in PIM.
129. **Financial Accounting and Reporting:** Project accounting will be managed in accordance with international accounting standards such as IPSAS. PMU, at the very start of the project, shall procure an appropriate accounting software to manage its accounts. All projects in Pakistan portfolio use TOMPRO as it fully meets IFAD project’s accounting needs. PMU shall seek exemption from Public Procurement Regulatory Authority (PPRA) rules for single sourcing of this software. The accounting system will manage and track funds in accordance with source of funds, component allocations, spending entities and disbursement categories. Monthly reconciliation will be carried out with the bank and Accountant General Office. PMU will maintain a full set of supportive records including fixed Assets Register, an invoice register, a cash book and a Contracts register. Necessary safeguards will be established and regularly reviewed to mitigate risks of fraud and to ensure faithful implementation of IFAD’s anti-corruption policy.
130. The PMU will be required to submit three types of financial reports to IFAD. Interim quarterly financial reports within 30 days of close of each quarter, indicating progress under each component and expenditure category, duly reconciled with the bank and signed by Finance Manager and PD. Detailed unaudited financial reports for each financial year within four months of the close of the financial year. And finally, the audited Financial Statements within 6 months of the close of the financial year (end of December each year).
131. All categories of IPs will submit quarterly financial progress reports to PMU. Quarterly Progress Reports will include Bank Statement duly signed by the Bank and designated IP person. These reports will provide one of the bases for the PMU and DCU M&E staff for field level inspections and verifications of physical progress and quality of delivery.
132. **Internal Audit:** To ensure satisfactory internal financial controls, PMU shall engage services of the Office of the Auditor General to perform compliance verifications on key project activities and the PMU will also engage the new internal audit function set up by WB/GoP to perform IA for all foreign aided projects. The TOR and terms of engagement shall be subject to IFAD No Objection. The agencies will submit quarterly reports to PD and comprehensive assessments on project financial management to PSC. These reports should also be made available to the supervision and implementation mission delegations.
133. **External Audit:** Auditor General of Pakistan shall conduct external audit of the Project accounts. PMU shall submit to the Auditor General office Annual Financial Statements of the project within two months of the end of financial year. External Audit will be completed within six months of the end of each financial year and project audit report together with the management letter shall be furnished to IFAD by 31 December each year. PMU will maintain regular liaison with the Auditor General office post-audit to ensure timely settlement of audit observations in the Departmental Audit Committee.

134. **Procurement:** Project procurements will be carried in accordance with Sindh Public Procurement Regulatory Authority (Sindh PPRA) Act and rules thereof, to the extent they are consistent with IFAD Procurement Guidelines and Financing Agreement. PMU will engage the services of a competent Procurement Manager and Contract Management Officer to assist the PMU in efficient conduct of all procurements. Annual Procurement Plans, consistent with the AWPB and PIM, will be prepared and provide the basis for the project procurement activities and phasing. All procurements will observe the IFAD prior review thresholds. IFAD standard bidding documents will be used for procurement of all goods, works and services. Project will prepare detailed guidelines, as part of PIM, for all community led procurements under community infrastructure.
135. **Governance:** Pakistan is a federation of 4 provinces and two regions with special status. Post 18th amendment to constitution, most sectors concerning IFAD mandate have become provincial preserve. The country has a comprehensive framework of constitutional, legal and institutional instruments to pursue merit and prevent corruption in public and private sector. Recruitments to executive positions in federal and provincial governments are carried out by independent public service commissions. There are federal and provincial Public Procurement regulatory authorities, established under acts of parliament with elaborate attendant rules, that regulate and oversee the procurements under public funds. National Accountability Bureau, created under a 2002 Presidential Ordinance, is also responsible for investigation and action against public officials and private businesses on complaints of corruption.
136. In Sindh province, there is The Sindh Enquiries and Anti-Corruption Act 1991. The Act constitutes an establishment headed by a Chairman and supported by Director Anti-Corruption with sweeping power for enquiry, arrest and prosecution in incidents or complaints of misuse of authority, violation of merit and financial corruption or misconduct. The Sindh Transparency and Right to Information Act 2016 is aimed at promoting transparency in the working of public authorities and enable citizens to get information rapidly and at low cost from any public authority.
137. IFAD has zero tolerance towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants and the provincial government is bound to take steps to prevent, mitigate, and combat such action during project implementation. In addition to promoting general awareness of IFAD's Anti-Corruption Policy among all parties that are involved in project implementation, PMU shall ensure that all contracts for procurement of goods, works, and services include a provision requiring suppliers, contractors and consultants to (i) ensure compliance with IFAD's anticorruption policy and (ii) allow IFAD to inspect their accounts, records and other documents relating to the bid submission and contract performance, and to have them audited, if deemed necessary. Lastly, the project will promote good governance through the involvement of communities and beneficiaries in (i) the preparation of the annual work plans and budgets; (ii) the procurement process (at community level); and (iii) the monitoring and evaluation of project activities. PMU may encourage confidential reporting of improprieties to the PD or senior management in P&DD under the existing provincial laws referred to above.
138. The contracts/MOU/As with third parties shall also include explicit compliance requirement with IFAD's Policy to Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse (www.ifad.org/anticorruption_policy), and IFAD's Anti-Money Laundering and Countering the Financing of Terrorism Policy (<https://www.ifad.org/en/document-detail/asset/41942012>).
139. The country financial management inherent risk is "high" due to issues related to: delays in staff recruitments; delays in AWPB formulation and submission; weak internal controls; weak FM capacities in partner organizations; use of inappropriate accounting software, and; delays in conduct of annual audits, submission of annual audit reports and timely resolution of audit observations. Financial management arrangements and staffing in SCRIP considers these concerns.
140. **Staffing:** PMU will have an adequately staffed FM section. PMU location in Karachi will provide access to relatively more competent pool of FM staff. Finance Manager will be competitively recruited on market-based salary and selection will require a No Objection from IFAD. Finance Manager will be assisted in his functions by competitively recruited Accounts Officer, a Budget & Finance Officer and two Accounts Assistants. Project will have largely centralized FM arrangements with all major procurements and service provision payments managed at PMU level. Each DCU will have one Accounts Assistant as the DCUs will manage only small operational budgets for the running of their offices. TOR for FM Section staff are provided in PIM.
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142. **Flow of Funds:** Project will have two sources of funds - IFAD and Government of Sindh. PMU will maintain separate assignment accounts in National Bank of Pakistan for each of the financiers. PD and Finance Manager will be the cosignatories for the management of bank accounts and disbursements. Apart from meeting PMU and DCUs own operational expenses, most of the investment funds will be expended through implementing partners. All implementing partners will maintain dedicated project accounts to facilitate tracking of funds disbursed and utilized. The flow of funds to IPs will be further elaborated in PIM and will be reflected in their contracts. Flow of funds to other public sector agencies will be based on the activities and expenses agreed in the MOU/As. Based on MOU/As and AWPB targets and phasing, PMU may provide initial one quarter advance to IPs. Subsequent releases will be on the basis of submission of account and invoices against the advance, adjustment of any unspent advance, and release of next tranche. Funds for VO related activities will be transferred to IPs on the pattern already in vogue in on-going IFAD projects in Pakistan and on the basis of VO and interest groups' approved plans. IPs will be responsible for rendering of quarterly financial statements of own and VOs expenses, to the DCU and PMU. PMU Finance Manager will cause

inspection of VOs and IPs' accounts at least once every six months. Detailed financial management framework for PMU and IPs is provided in PIM.

143. **Financial Accounting and Reporting:** Project accounting will be managed in accordance with international accounting standards such as IPSAS. PMU, at the very start of the project, shall procure an appropriate accounting software to manage its accounts. All projects in Pakistan portfolio use TOMPRO as it fully meets IFAD project's accounting needs. PMU shall seek exemption from Public Procurement Regulatory Authority (PPRA) rules for single sourcing of this software. The accounting system will manage and track funds in accordance with source of funds, component allocations, spending entities and disbursement categories. Monthly reconciliation will be carried out with the bank and Accountant General Office. PMU will maintain a full set of supportive records including fixed Assets Register, an invoice register, a cash book and a Contracts register. Necessary safeguards will be established and regularly reviewed to mitigate risks of fraud and to ensure faithful implementation of IFAD's anti-corruption policy.
144. The PMU will be required to submit three types of financial reports to IFAD. Interim quarterly financial reports within 30 days of close of each quarter, indicating progress under each component and expenditure category, duly reconciled with the bank and signed by Finance Manager and PD. Detailed unaudited financial reports for each financial year within four months of the close of the financial year. And finally, the audited Financial Statements within 6 months of the close of the financial year (end of December each year).
145. All categories of IPs will submit quarterly financial progress reports to PMU. Quarterly Progress Reports will include Bank Statement duly signed by the Bank and designated IP person. These reports will provide one of the bases for the PMU and DCU M&E staff for field level inspections and verifications of physical progress and quality of delivery.
146. **Internal Audit:** To ensure satisfactory internal financial controls, PMU shall engage services of the Office of the Auditor General to perform compliance verifications on key project activities and the PMU will also engage the new internal audit function set up by WB/GoP to perform IA for all foreign aided projects. The TOR and terms of engagement shall be subject to IFAD No Objection. The agencies will submit quarterly reports to PD and comprehensive assessments on project financial management to PSC. These reports should also be made available to the supervision and implementation mission delegations.
147. **External Audit:** Auditor General of Pakistan shall conduct external audit of the Project accounts. PMU shall submit to the Auditor General office Annual Financial Statements of the project within two months of the end of financial year. External Audit will be completed within six months of the end of each financial year and project audit report together with the management letter shall be furnished to IFAD by 31 December each year. PMU will maintain regular liaison with the Auditor General office post-audit to ensure timely settlement of audit observations in the Departmental Audit Committee.
148. **Procurement:** Project procurements will be carried out in accordance with Sindh Public Procurement Regulatory Authority (Sindh PPRA) Act and rules thereof, to the extent they are consistent with IFAD Procurement Guidelines and Financing Agreement. PMU will engage the services of a competent Procurement Manager and Contract Management Officer to assist the PMU in efficient conduct of all procurements. Annual Procurement Plans, consistent with the AWPB and PIM, will be prepared and provide the basis for the project procurement activities and phasing. All procurements will observe the IFAD prior review thresholds. IFAD standard bidding documents will be used for procurement of all goods, works and services. PMU will prepare detailed guidelines, as part of PIM, for all community led procurements under community infrastructure. The initial 18-month procurement plan will be updated at Project start-up. At project start-up, the PMUs shall update, complete and furnish to IFAD for its approval, the 18 months Procurement Plan through the OPEN (IFAD's Online Procurement End to End System) as a mandatory measure. IFAD's Prior and Post Review Requirements and thresholds and documentation for prior reviews will be described in PPA. All requests for IFAD prior review and No Objection (including AWPB, Procurement Plan, procurement documents at different stages subjected to IFAD prior review, project guidelines and manuals, etc.) will be carried out through the OPEN (End-to-End system). Post-review contracts and grants should be also uploaded to the OPEN system.
149. **Governance:** Pakistan is a federation of 4 provinces and two regions with special status. Post 18th amendment to constitution, most sectors concerning IFAD mandate have become provincial preserve. The country has a comprehensive framework of constitutional, legal and institutional instruments to pursue merit and prevent corruption in public and private sector. Recruitments to executive positions in federal and provincial governments are carried out by independent public service commissions. There are federal and provincial Public Procurement regulatory authorities, established under acts of parliament with elaborate attendant rules, that regulate and oversee the procurements under public funds. National Accountability Bureau, created under a 2002 Presidential Ordinance, is also responsible for investigation and action against public officials and private businesses on complaints of corruption.
150. In Sindh province, there is The Sindh Enquiries and Anti-Corruption Act 1991. The Act constitutes an establishment headed by a Chairman and supported by Director Anti-Corruption with sweeping power for enquiry, arrest and prosecution in incidents or complaints of misuse of authority, violation of merit and financial corruption or misconduct. The Sindh Transparency and Right to Information Act 2016 is aimed at promoting transparency in the working of public authorities and enable citizens to get information rapidly and at low cost from any public authority.
151. IFAD has zero tolerance towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants and the provincial government is bound to take steps to prevent, mitigate, and combat such action during project implementation. In addition to promoting general awareness of IFAD's Anti-Corruption Policy among all parties that are involved in project implementation, PMU shall ensure that all contracts for procurement of goods, works, and services include a provision requiring suppliers, contractors and consultants to (i) ensure compliance with IFAD's anticorruption policy and (ii) allow IFAD to inspect their accounts, records and other documents relating to the bid submission and contract performance, and to have them audited, if deemed necessary. Lastly, the project will promote good governance through the involvement of communities and beneficiaries in (i) the preparation of the annual work plans and budgets; (ii) the procurement process (at community level); and

(iii) the monitoring and evaluation of project activities. PMU may encourage confidential reporting of improprieties to the PD or senior management in P&DD under the existing provincial laws referred to above.

152. The contracts/MOU/As with third parties shall also include explicit compliance requirement with IFAD's Policy to Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse (www.ifad.org/anticorruption_policy), and IFAD's Anti-Money Laundering and Countering the Financing of Terrorism Policy (<https://www.ifad.org/en/document-detail/asset/41942012>).

L. Planning, M&E, Learning, KM and Communication

a. Planning, M&E, Learning, Knowledge Management and Communication

153. SCRP will build on institutional capacity of the Government of Sindh's Monitoring and Evaluation Cell (MEC) in P&D for development schemes. A core group at PMU will lead a participatory planning, M&E, knowledge management and communication framework involving implementing partners, service providers, village organizations and interest groups.
154. **Planning.** The Annual Work Plan and Budget (AWPB) will be based on project design, cost estimates and phasing following GoP's annual planning cycle (July-June). The PMU will develop AWPB in collaboration with implementing partners to be submitted to PSC for approval by 30 April and then shall be submitted to IFAD for no objection before 31st May every year. AWPB preparation will be a consultative exercise involving PMU, implementing partners, private entities (relevant to 4Ps), village/producers' organizations and other stakeholders.
155. **Monitoring and evaluation.** The key function of M&E system will be to provide project management, the Government and IFAD with reliable and timely information on project execution, performance and results to ensure efficient and effective project implementation, enable timely course correction, and gauge the impact of project activities. The focus of monitoring will be aligned with AWPB and log frame indicators. The M&E system will be participatory, involving the supported institutions and implementing partners in data collection. M&E system will monitor activities, output targets and outcomes as per the AWPB and log frame indicators.
156. **Management Information System (MIS).** The PMU will establish log frame based MIS consisting of quantitative measures supplemented by qualitative data. MIS will facilitate data collection, analysis and exchange. The MIS will be assessed during the MTR and shall be modified as may be required. MIS reporting templates will be compliant with the requirements of Government of Sindh and IFAD.
157. **Progress Monitoring.** The M&E team will consist of an M&E Manager based at PMU supported by an M&E Officer and DCU M&E officers (one each per district), MIS officer and a dedicated Knowledge Management and Communications Specialist. The M&E Manager will be responsible for setting up planning, monitoring and evaluation function for the entire project and will be guided by IFAD M&E guidelines. The M&E manager will develop standard templates for data collection and reporting and will be part of MOUs/MOAs/contracts with implementing partners. The reporting templates will cover both physical and financial aspects.
158. **Measuring resilience and adaptation.** The project will incorporate the IFAD Resilience Design and Monitoring Tool (RDMT)^[51] in the log frame and may explore the incorporation as relevant in the MIS of the Rural Invest^[52] software for feasibility and business planning purposes.
159. **Analysis and Evaluation.** The mandatory requirements for evaluation include (i) baseline evaluation/study that establish the initial situation before the project support; (ii) midline evaluation undertaken at around half lifespan of project lapsed - Comparison with baseline data will allow the measurement of changes in core indicators, and thus to infer on the project's direction of travel toward the project outcomes. The MTR shall identify implementation bottlenecks and suggest remedial actions —which may also include modification in the project design as appropriate. The Baseline Survey will be undertaken soon after project start-up through third-party. The baseline, midline and end-line methodology shall be shared with IFAD for concurrence.
160. **Thematic and collaborative studies.** SCRP will conduct additional studies which shall be carried out during the entire life of the project in collaboration with the ADB. This will be used to monitor and assess on-going adaptation among a reference group having the combined effect of IFAD and ADB as well as the individual contribution of IFAD assistance independent of ADB collaboration. The PMU will use technical assistance/consultants for carrying out thematic technical, evaluation and impact studies. The topics for these thematic studies will be identified and confirmed in the inception phase and the mid-term.
161. **Learning, knowledge management and communication.** The KM officer will prepare a KM strategy and action plan which will be annually updated. The project's knowledge management will be linked to the project's development objectives, especially for learning related to resilience building, pathways for improved nutrition, youth empowerment and access to finance. The strategy for KM will be two-pronged: (i) a knowledge management within the project for facilitating project-wide learning and decision making; and, (ii) support for a broader knowledge management aimed at informing government decision-makers and influencing policy.
162. The KM officer will develop a dedicated communication strategy that should chart communication protocols in line with IFAD and GoS protocols both for internal and external communication. The KM officer will develop stakeholder specific KM/COM material as and when required. In addition, document lessons learned, videos combining before and after footage of project, policy briefs etc.

b. Innovation and scaling up

163. Inclusive VOs representing entire village development aspirations in contrast to current model of first creation of multiple activity specific COs in a village and then establish a skeletal VO consisting of Presidents and Secretaries of all COs. The inclusive VOs will enable all stakeholders to look at the development challenges and opportunities from whole-village-perspective and generate a more robust social capital, collective effort and broad-based ownership.
164. Financial inclusion of the large currently unserved poor households, including youth and women, and establishment of their credit history for sustained access to financial services.
165. Climate adapted and resilient value chains, serviced by capacitated financial and technical service providers, for improved incomes in a gender, youth and nutrition sensitive manner.
166. Offshore aquaculture development providing meaningful income generation opportunities to the youth in fisherfolk communities and reducing pressure on depleting marine fisheries stock.
167. In the available resources, project will be implemented in only one third of the Union councils in 3 districts. Successful implementation and achievement of desired outcomes will open up opportunity for its further scaling up in rest of the rural Union Councils, as has already happened in the case of SPPAP. It will also create opportunities for additional co-financing and larger government counterpart funding.

M. Project Target Group Engagement and Feedback, and Grievance Redress

a. Project Target Group Engagement and Feedback.

168. SCRP approach is participatory, both at the management as well as the beneficiary level, opening up host of opportunities for the target groups ownership, engagement and feedback. The AWPB formulation process will involve all implementing partners and DCUs; the beneficiary level plan development will involve VO/Interest Groups' members, implementing partners, IP staff and service providers; monthly and quarterly reviews at DCU and PMU level will involve all implementing partners; a properly staffed M&E section, both at PMU and DCU level, will carry out regular field monitoring as well as ad-hoc field inspections and surveys to: ensure no elite capture is taking place and VO office bearers have been transparently selected; VO plans reflect the real aspirations of beneficiaries at large and make economic sense; benefit from project are equitably distributed; beneficiaries are satisfied with delivery quality and outcomes; a project guideline for VO plan development will ensure inclusion of gender, climate adaptation, nutrition and youth concerns and project interventions to address them; gender balance will be ensured in terms of project targeting, VO management, interest groups membership and interventions as well as project staffing.
169. The PMU will organize regular project performance feedback sessions both with the implementing partners as well as beneficiary VO office bearers to take stock of project's effectiveness, relevance and quality of intervention delivery. M&E teams of project will be trained to carry out participatory monitoring and prepare a proper log of actionable points for management consideration and submit these for the consideration and action of project management. IFAD Supervision Missions will be another layer of feedback mechanism where the missions will review the efficacy of project response to feedback received through M&E staff and also assess for themselves the beneficiary concerns and advise project management accordingly.

b. Grievance redress.

170. Pakistan is signatory to ADB/OECD Anti-Corruption Initiative for Asia and the Pacific, that calls for effective and transparent systems for public service, to strengthen anti-bribery initiatives, to promote integrity in business operations, and to support citizens' involvement. It also calls for adequate arrangements to receive, address and report grievances. Sindh Government has a dedicated agency, Enquiries & Anti-Corruption Establishment, headed by a Grade-21 Officer, enquiring into and awarding punishments for corruption by public servants. Any citizen can complain to E&ACE against any public official for alleged acts of corruption. There is also Sindh Chief Secretary's Complaint Cell, recently integrated with Sindh Legal Advisory Call Centre, that responds to citizen's complaints against public office holders' acts of corruption as well as legal advice on redressal.
171. In addition to the above existing grievance redressal mechanisms, the project will put in place project specific multi-layered and multi-channel system for receipt and redressal of grievances with regard to project activities. The PMU will establish dedicated phone numbers at central and district level for grievance registration as well as create grievance portal on project website for registration of complaints. Complaint logs will be maintained containing detail of complaint, action taken and result.

N. Implementation plans

a. Supervision, Mid-term Review and Completion plans.

172. In order to overcome the persistent issue of delays in project start-up, and based on the lessons learned in the Pakistan portfolio and region, Sindh P&D Board will be required to complete certain key actions between end of design and loan effectiveness. This will ensure that all preparatory activities for a quick start-up are complete. First and foremost will be timely completion of government's internal project approval process including a PC-I duly approved by Planning Commission/Executive Committee of National Economic Council (ECNEC). IFAD will extend necessary technical support to P&D immediately after completion of project design to ensure timely preparation and submission of PC-I for approval of Provincial Development Working Party (PDWP), Central Development Working Party (CDWP) and ECNEC. Parallel to that, P&D Board will ensure recruitment of at least core staff of PMU and DCUs before loan effectiveness. Suitable buildings for PMU and DCUs will also be identified and rented. Expenses on these activities will be eligible for retroactive financing.
173. **Supervision Missions:** IFAD will conduct a start-up Mission at the start of project to guide the project staff and IPs on project implementation approach and processes. Additional implementation support missions may be carried out to support expeditious implementation. Full Supervision Mission will be conducted after the completion of first year and at the conclusion of each year subsequently.
174. **Mid-Term Review:** A joint mid-term review by IFAD and Government of Sindh/PMU will be carried out at mid-point of project implementation. Mid-Term review will take holistic stock of project's progress against development objectives, quality of delivery and impact on target beneficiaries. Identify any constraints and bottlenecks and recommend remedial actions including any needed restructuring of components and repurposing of project resources to ensure that project development objectives and impacts are realised in remaining project period.
175. **Project Completion Review:** IFAD, in collaboration with the PMU, will prepare a Project Completion Report in the last year of project in the form and the substance specified by IFAD. The PCR shall include: progress against project development objectives and log frame performance indicators, physical and financial progress against each component and sub-component, performance of financiers and implementing entities, and lessons learned.

Footnotes

[1] World Bank, 2022.

[2] www.Statista.com.

[3] World Bank. 2023.

[4] Multidimensional Poverty Index: developing countries -2020
http://hdr.undp.org/sites/default/files/2020_mpi_statistical_data_table_1_and_2_en.pdf

[5] World Bank, 2023.

[6] <https://www.pbs.gov.pk/sites/default/file>.

[7] Rana, W. (2019): Creating fiscal space for enhancing public investment in Sindh agriculture sector. PACE policy research paper.

[8] World Bank (2022): *Pakistan Country Climate and Development Report*. Washington, DC.

[9] World Bank.

[10] FAO, WFP, WHO, UNICEF (2020): Pakistan Overview of Food Security and Nutrition.

[11] Sindh Districts Profile, P&D Department, Sindh.

[12] Pakistan Bureau of Statistics.

[13] The State of Poverty in Pakistan. Pakistan Institute of Development Economics (PIDE), 2021.

[14] Sub-district known as Tehsil in other provinces.

[15] Community Organizations comprising 18-20 households, Village Organizations representing 6-8 COs (150-200 households) and Local Support Organizations at Union Council level representing all VOs in a Union Council.

[16] Pakistan Bureau of Statistics. 2018. Labour Force Survey 2017-18

[17] <https://www.pc.gov.pk/uploads/report/NGPF.pdf>

[18] <https://asiapacific.unwomen.org/en/countries/pakistan>.

[19] Sindh Agriculture Policy (2018-2030)

[20] N. A. Shah. Pakistan Journal of Gender Studies 207 Vol. 13, pp. 207-220, ISSN: 2072-0394.

- [21] Pakistan's official definition for youth is 15-29 years of age.
- [22] <http://hdr.undp.org/en/content/unleashing-potential-young-pakistan#>
- [23] National Nutrition Survey 2018, Ministry of Health Services, Government of Pakistan
- [24] Pakistan Nutrition and Humanitarian Overview 2022. UNICEF
- [25] Pakistan National Nutrition Survey 2018, MOH, Government of Pakistan
- [26] Global Climate Risk Index 2020, www.germanwatch.org/en/cri
- [27] Chaudhry, Q.U.Z et al. 2009
- [28] S.U. Fatima et al (2021), INT. J. BIOL. BIOTECH., 18 (3): 485-497, 2021. Variation in Climatological Regimes in Coastal Rural Districts of Sindh, Pakistan.
- [29] World Bank (2022): *Pakistan – Country Climate and Development Report*. Washington, DC.
- [30] Ministry of Climate Change. Government of Pakistan (2018): Pakistan's second national communication on climate change. To the United Nations Framework Convention on Climate Change.
- [31] Sindh Districts Profile, P&D Department, Sindh.
- [32] IFAD's SCRP-financed intervention is a parallel co-financing to finance the Livelihoods component complementing ADB's SCRP financing of infrastructure. IFAD's Livelihoods component is designed and implemented by IFAD separately from the ADB components, within a common design and monitoring framework, strong collaboration, and complementary project areas.
- [33] See for example Promoting Agricultural Commercialization and Enterprises Project (PACE), Bangladesh.
- [34] Financial Inclusion in Pakistan. MDF/AusAid. May 202234
- [35] Of IFAD parallel financed component in SCRP.
- [36] Pakistan Bureau of Statistics. 2016
- [37] Age group 15-29
- [38] Households in 0-32 band in NSER are considered ultra-poor and poor and eligible for UCT under BISP.
- [39] ADB financing to SCRP will be a 'sector loan' and only the first 2-3 main infrastructure subprojects will be prepared and designed to feasibility level. The remainder will be done in the course of project implementation, allowing for adjustment and alignment with IFAD's interventions during that time, e.g. through criteria to prioritize areas and alignment between both financiers' interventions/areas. A joint steering committee in P&D will ensure complementarity.
- [40] Badin and Shaheed Fazil Rahu in Badin, Jati and Shah Bandar in Sujawal, and Ghora Bari, Keti Bandar and Mirpur Sakro in Thatta.
- [41] Tentative list of target UCs in each Taluka is provided in PIM which will be further validated at the start of project.
- [42] *Deh* denotes a Revenue Village in Revenue Record of Lands which most often consists of more than one natural villages and settlements of different sizes.
- [43] Only limited number of villages in each union Council and main activity is asset provision to ultra-poor households and vocational/technical training for youth. In village targeting, duplication with NPGP interventions will be avoided.
- [44] Smaller interest groups are anticipated in fisherfolk communities with group of 5/6 investing in a shared boat or off-shore aquaculture development.
- [44] Beneficiaries of unconditional cash transfers under Benazir Income Support Programme/the very poor.
- [46] Pakistan's official definition of youth, adopted by Sindh Youth Policy.
- [47] SDGs 1 (No poverty), 2 (Zero Hunger), 3 (Good Health & wellbeing), 8 (Decent work & Economic Growth), 10 (reduced Inequalities), 13 (Climate Action) and 15 (Life on Land).
- [48] Strengthened basic social services (water, sanitation, nutrition, WASH), empowerment of women and girls, restoration of Indus basin health, sustainable green economic growth for decent work, and inclusive accountable governance system.
- [49] Awaiting Cabinet approval.
- [50] <http://cdm15738.contentdm.oclc.org/cdm/ref/collection/p15738coll2/id/132714>)
- [51] <https://www.ifad.org/documents/38714170/46740629/htdn-rdmt.pdf/eef9da98-2b1c-af48-62e1-8583b42d04de?t=1668158824285>
- [52] <http://www.fao.org/in-action/ruralinvest/toolkit/en/>

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 1: Logframe

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

Sindh Coastal Resilience Project

Logical Framework

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Outreach	1 Persons receiving services promoted or supported by the project				M&E system	Quarterly and annually	PMU	A baseline survey is conducted to establish the baseline Project approach and timelines are adhered to An efficient M&E system is developed and implemented
	Males	0	72000	156000				
	Females	0	48000	104000				
	Young		40000	78000				
	Not Young							
	Non-Indigenous people							
	Total number of persons receiving services	0	120000	260000				
	Male		60	60				
	Female		40	40				
	Young		30	30				
	1.a Corresponding number of households reached				M&E system	Quarterly and annually	PMU	
	Households	0	90000	195000				
	1.b Estimated corresponding total number of households members				M&E system	Quarterly and annually	PMU	
	Household members	0	468000	1014000				
Project Goal Reduce poverty and malnutrition and improve climate resilience among rural poor households	Households reporting having graduated to a higher poverty score card level				Baseline and Endline Surveys/Poverty Wealth Ranking	Baseline and Endline	PMU	Ultra-poor and poor households have been assisted through project interventions
	Households	0	50	50				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Development Objective Promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups	SF.2.1 Households satisfied with project-supported services				COI Survey	Baseline, Mid-Term and Endline	PMU	Updated BISP data on poverty available for targeting Targeting guidelines available, Project staff trained and transparent targeting process implemented Political and economic stability and security
	Household members	0	280800	709800				
	Households (%)	0	60	70				
	Households (number)	0	54000	136000				
	SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers				COI Survey	Baseline, Mid-Term and Endline	PMU	
	Household members	0	140400	507000				
	Households (%)	0	30	50				
	Households (number)	0	27000	97500				
	Targeted households have improved incomes				Baseline, Mid- and Endline Surveys	Baseline, Mid-Term and Endline	PMU	
	hh	0	27000	136500				
	Households	0	30	70				
	Households have improved their resilience				IFAD RDMT	Baseline, Mid-Term and Endline	PMU	
	Households	0	30	70				
	3.2.3 Households reporting a significant reduction in the time spent for collecting water or fuel							
Households		18000	58500					
Households		20	30					
Total household members		93600	304200					
Outcome 1. Improved production under climate smart agriculture and fisheries integrated with better access to markets and formal financial services	1.2.4 Households reporting an increase in production				COI Survey	Baseline, Mid-Term and Endline	PMU	Households are willing to participate in project activities under farmer organisations and 4Ps Busienss mobilization partner(s) selected in a timely manner
	Total number of household members	0	160160	400400				
	Households	0	30	70				
	Households	0	27000	136500				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	1.2.5 Households reporting using rural financial services				COI Survey	Baseline, Mid-Term and Endline	PMU	
	Total number of household members	0	201500	400400				
	Households	0	28	43				
	Households	0	38750	55000				
	3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices				COI Survey	Baseline, Mid-Term and Endline	PMU	
	Total number of household members	0	107640	608400				
	Households	0	23	60				
	Households	0	20700	117000				
Output 1.1 Climate Resilient Value Chain Plan Development. Fisherfolk and producers organized are supported for the development of VC/production business plans and 4Ps	1.1.4 Persons trained in production practices and/or technologies				M&E system	Quarterly and annually		Professional farmer organisations established and incorporated under a regulatory framework Market based business plans developed
	Total number of persons trained by the project	0	44000	110000				
	Total number of attendances to training sessions	0	44000	110000				
	Men trained in crop	0	15400	38500				
	Women trained in crop	0	6600	16500				
	Young people trained in crop	0	11000	27500				
	Men trained in fishery	0	15400	38500				
	Women trained in fishery		6600	16500				
	Young people trained in fishery		11000	27500				
	Total persons trained in crop	0	22000	55000				
	Total persons trained in fishery	0	22000	55000				
	Villages and producer groups supported in the development of business plans				M&E system	Quarterly and annually	PMU	
	number of villages mobilized	0	200	500				
	number of producer groups	0	2000	5000				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	total people in producer groups	0	44000	110000				
	Female members in producer groups	0	13200	33000				
	Male members in producer groups	0	30800	77000				
	Young members in producer groups	0	13200	33000				
Output 1.2 Community and Value Chain Support Infrastructure	Demand-driven small infrastructure built (type of infrastructure and targets to be decided by the communities)				M&E system	Quarterly and annually	PMU	All beneficiaries have the opportunity to express their needs, and have sufficient information about what the project can offer.
	community and value-chain infrastructure	0	489	602				
	Household-based infrastructure	0	11592	17644				
	HH benefitting from small infrastructure schemes	0	66000	110000				
	2.1.5 Roads constructed, rehabilitated or upgraded				M&E system	Quarterly and annually	PMU	
	Length of roads	0	60	111				
Output 1.3 Access to financial services for value chain and enterprise development (for the financing of the business plans)	1.1.5 Persons in rural areas accessing financial services				M&E system	Quarterly and annually	PMU	beneficiaries willing to use financial services
	Total number of accesses to financial services	0	38750	55000				
	Men in rural areas accessing financial services - credit	0	31000	44000				
	Women in rural areas accessing financial services - credit	0	7750	11000				
	Young people in rural areas accessing financial services - credit	0	11625	16500				
	Total persons accessing financial services - credit	0	38750	55000				

Results Hierarchy	Indicators				Means of Verification			Assumptions	
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility		
Outcome 2. Increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless)	2.2.1 Persons with new jobs/employment opportunities				COI Survey	Baseline, Mid-Term and Endline	PMU	Selection of training providers having technical capacity and accredited for certification; trainings are held in times and locations conducive to the participation of women and female youth	
	Males	0	23220	33204					
	Females	0	15480	22136					
	Young	0	25155	35971					
	Total number of persons with new jobs/employment opportunities	0	38700	55340					
Output 2.1 Vocational and entrepreneurship training on income-generating activities, business management and financial literacy	2.1.2 Persons trained in income-generating activities or business management				M&E system	Quarterly and annually	PMU	Careful assessment of each household's potential and endowments	
	Males	0	11700	17400					
	Females	0	7800	11600					
	Young	0	12675	18850					
	Persons trained in IGAs or BM (total)	0	19500	29000					
	1.1.7 Persons in rural areas trained in financial literacy and/or use of financial products and services				M&E system	Quarterly and annually	PMU		
	Males	0	19050	43200					
	Females	0	12700	28800					
	Young	0	20638	46800					
	Persons in rural areas trained in FL and/or use of FProd and Services (total)	0	31750	72000					
	Output 2.2 Provision of productive assets to ultra-poor	Persons accessing productive assets				M&E system	Quarterly and annually	PMU	BISP data is accurately validated by the implementers
		Males	0	9600	13170				
		Females	0	9600	13170				
Young		0	5760	7902					
total of persons		0	19200	26340					

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Output 2.3 Access to start-up capital (grant) for business development	persons accessing start-up capital				M&E System	Quarterly and annually	PMU	People trained are willing to start a business
	Young	0	10500	17000				
	Male	0	6300	10200				
	Female	0	4200	6800				
	Total persons	0	10500	17000				
Outcome 3. Households have improved nutrition knowledge, attitudes and practices	1.2.9 Households with improved nutrition Knowledge Attitudes and Practices (KAP)				COI survey	Baseline, Mid-Term and Endline	PMU	Persons/women are given the possibility to attend the trainings, in timings and locations accessible for all. Trainings are being carried out by experts in nutrition who speak the local language
	Households (number)	0	30000	70000				
	Households (%)	0	30	70				
	Household members	0	195000	455000				
Output 3.1 Development of human capital of rural people and communities on nutrition, climate change, natural resources management and gender empowerment	1.1.8 Households provided with targeted support to improve their nutrition				M&E system	Quarterly and annually	PMU	Communities positively received the training opportunities offered by the programme. Innovative channels for campaign facilitated
	Total persons participating	0	40000	100000				
	Males	0	20000	50000				
	Females	0	20000	50000				
	Households	0	40000	100000				
	Household members benefitted	0	208000	520000				
	Young	0	9000	30000				
	Inclusive village organizations (VO) receiving trainings on natural resources management, climate change and gender empowerment				M&E System	Quarterly and annually	PMU	
	VOs with trainings on Natural Resource Management	0	350	500				
	VOs with trainings on climate change	0	350	500				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	VOs with trainings on gender empowerment	0	350	500				
Outcome 4. Supportive policy instruments identified and promulgated for enhanced incomes and resilience of project target beneficiaries	Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment				Government Policy document	Baseline, Mid-Term and Endline	PMU	Public institutions interest and priority for rural extension services remain stable during the project life
	Number	0	1	2				
Output 4.1 Innovative investment schemes for alternative and climate-resilient value-chains financing through the Innovation Challenge Fund	Number of persons receiving innovative financing				M&E system	Quarterly and annually	PMU	Private sector, research institutions, universities and other development actors find the Innovation Challenge Fund useful and participate The partnering organizations successfully link the initiatives with the projects' target groups
	total number of persons	0	10000	40000				
	Males	0	6000	24000				
	Females	0	4000	16000				
	Young	0	3000	12000				
Output 4.2 Public institutions strengthening for the provision of better extension services	Delivery capacities of public institutions strengthened				M&E system	Quarterly and annually	PMU	Public institutions interest and priority for rural extension services remain stable during the project life
	Public institutions supported to improve their operating capacities	0	3	3				
Output 4.3 Policy relevant knowledge products	Policy 1 Policy-relevant knowledge products completed				M&E system	Quarterly and annually	PMU	Public institutions interest and priority for rural extension services remain stable during the project life
	Number	0	2	4				

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 2: Theory of change

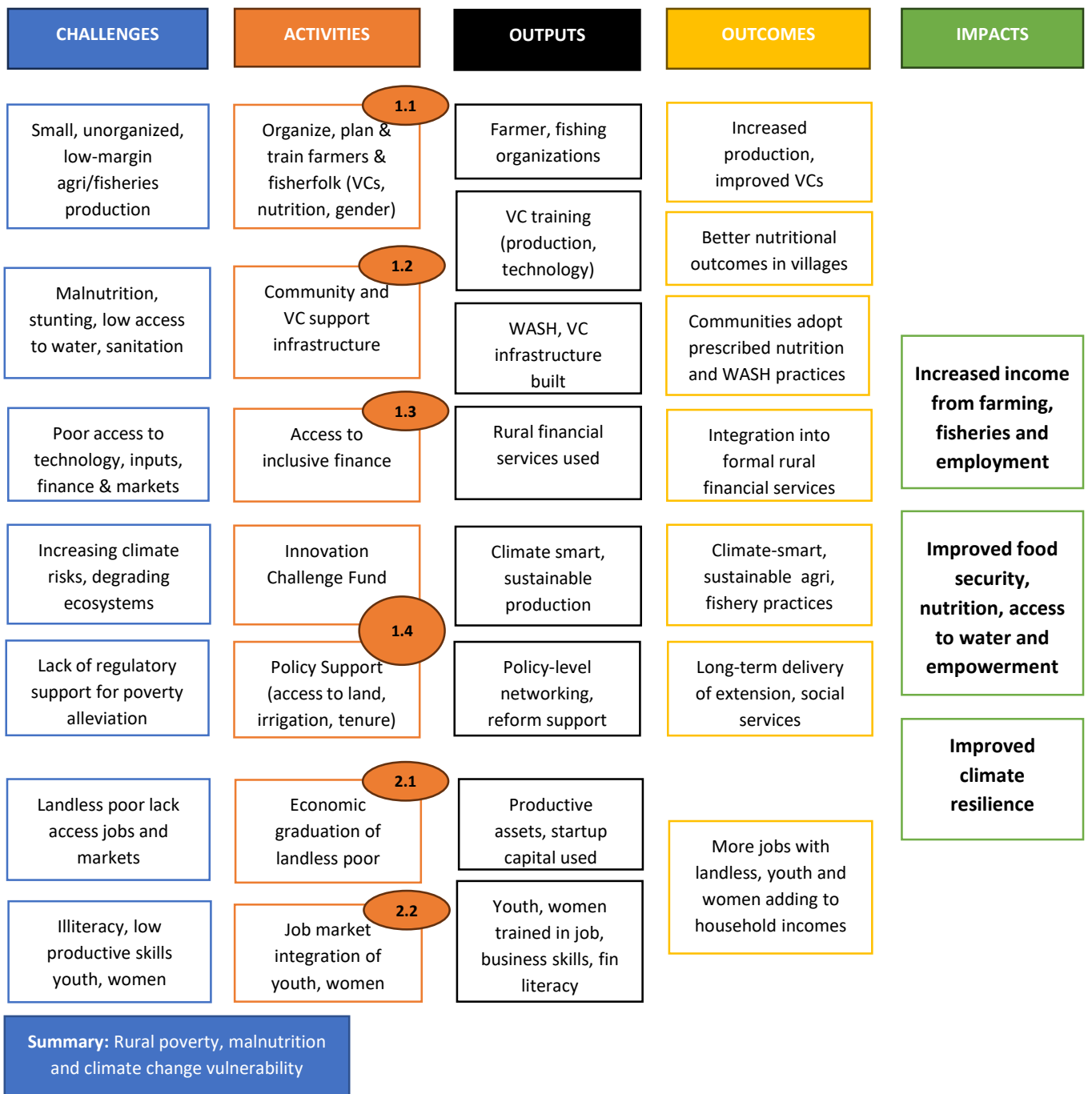
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Asia and the Pacific Division
Programme Management Department



Pakistan

Sindh Coastal Resilience Project

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Annex 3: Project cost and financing: Detailed costs tables

Mission Dates: 29 October to 10 November 2023

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Appendix 3: Programme cost and financing.

A. Programme costs

1. The total investment and recurrent costs over the 7-year period, including physical and price contingences is USD 163.544 million detailed in table 1 below.

Table 1: Programme Components by Year – including Contingencies.

Islamic Republic of Pakistan
Sindh Coastal Resilience Project

Project Components by Year – Totals Including Contingencies	Totals Including Contingencies (US\$ '000)							Total
	2025	2026	2027	2028	2029	2030	2031	
A. Transformation of Income Opportunities								
1. Organization, Planning & Training	53	283	662	859	874	860	860	4,452
2. Community and Value Chain Support Infrastructure	999	3,317	3,787	8,341	7,775	5,767	4,491	34,477
3. Financial Inclusion	8,483	6,795	9,283	18,030	13,928	18,743	-	75,262
4. Institutional Support	653	237	231	224	220	216	216	1,997
5. Challenge fund and policy support	200	435	708	1,096	809	221	-	3,469
Subtotal	10,389	11,068	14,670	28,549	23,606	25,808	5,568	119,657
B. Economic and Social Inclusion								
Economic Graduation of Landless Poor	1,520	2,377	2,898	3,069	3,127	2,692	2,058	17,741
Job Market Integration of Youth	1,050	2,031	1,888	3,127	3,099	2,962	685	14,843
Intiutional Support to STEVTA	807	54	87	541	82	80	33	1,684
Subtotal	3,377	4,462	4,873	6,737	6,309	5,734	2,776	34,268
C. Project Management & Implementation Support								
Project Management	1,126	652	662	665	671	683	713	5,172
Implementing Partners	288	484	755	877	689	678	677	4,448
Subtotal	1,414	1,136	1,417	1,541	1,360	1,361	1,390	9,619
Total PROJECT COSTS	15,179	16,665	20,961	36,828	31,275	32,903	9,734	163,544

B. Programme financing

2. The project will be financed through an IFAD financing of USD\$60 million loan on blend terms and a financing gap to be subsequently financed through a USD40 million loan. The financing also includes contribution of USD 6.73 million by the Government of Sindh mainly on account of taxes and project management cost. The private sector's contribution is estimated at USD0.9 million while beneficiary contribution is estimated at USD2.756 million. A significant investment is expected to be leveraged from participating financial institutions estimated at USD53.132 million against the credit subsidy and partial credit guarantee funded through the project investments. Details are given in Table 2.

Table 2: Programme Costs by Component and Financiers

Islamic Republic of Pakistan
Sindh Coastal Resilience Project
Components by Financiers

(US\$ '000)						
IFAD Loan	GoS	Financing Gap	4P		Commercial	Total
			Private Scetor	Beneficiary Contribution	Banking Scetor	
Amount	Amount	Amount	Amount	Amount	Amount	Amount
A. Transformation of Income Opportunities						
1. Organization, Planning & Training	2,863	113	551	925	-	4,452
2. Community and Value Chain Support Infrastructure	13,069	1,449	17,204	-	2,756	34,477
3. Financial Inclusion	15,409	-	6,721	-	-	75,262
4. Institutional Support	1,325	300	372	-	-	1,997
5. Challenge fund and policy support	1,343	653	1,472	-	-	3,469
Subtotal	34,008	2,515	26,321	925	2,756	119,657
B. Economic and Social Inclusion						
Economic Graduation of Landless Poor	9,463	1,393	6,885	-	-	17,741
Job Market Integration of Youth	10,135	-	4,708	-	-	14,843
Intiational Support to STEVTA	1,227	-	457	-	-	1,684
Subtotal	20,825	1,393	12,050	-	-	34,268
C. Project Management & Implementation Support						
Project Management	2,628	2,156	388	-	-	5,172
Implementing Partners	2,540	667	1,241	-	-	4,448
Subtotal	5,167	2,823	1,630	-	-	9,619
Total PROJECT COSTS	60,000	6,731	40,000	925	2,756	163,544

Detailed cost tables

Islamic Republic of Pakistan
Sindh Coastal Resilience Project
Table 1.10. Organizing, training and planning

Detailed Costs	Unit	Quantities							Unit Cost (PKR)	Unit Cost (US\$)	Totals Including Contingencies (US\$)							Total	
		2025	2026	2027	2028	2029	2030	2031			Total	2025	2026	2027	2028	2029	2030		2031
I. Investment Costs																			
A. Community and value chain support																			
1. Targeting, Community Mobilization and VO formation																			
VO Formation and Umbrella Plans /a	number	30	50	50	70	50	50	50	350	8,355	30	918.0	1,479.5	1,444.4	1,955.9	1,374.5	1,352.7	1,352.7	9,877.8
VO Manager Trainings	number	60	100	100	140	200	200	200	1,000	2,785	10	612.0	986.4	962.9	1,303.9	1,832.7	1,803.6	1,803.6	9,305.2
VO Manager Conferences	number	1	3	3	3	3	3	3	19	8,355	30	30.6	88.8	86.7	83.8	82.5	81.2	81.2	534.7
Interst Groups Manager Training	number	60	100	100	140	200	200	200	1,000	2,785	10	612.0	986.4	962.9	1,303.9	1,832.7	1,803.6	1,803.6	9,305.2
Interst Groups Plans and Trainings	Groups	150	250	250	350	400	400	400	2,200	55,700	200	30,600.0	49,317.7	48,147.5	65,196.4	73,308.4	72,144.8	72,144.8	410,859.5
Improved Production Technology Demonstrations	Groups	150	250	250	350	500	500	500	2,500	30,635	110	16,830.0	27,124.7	26,481.1	35,858.0	50,399.5	49,599.5	49,599.5	255,892.4
Miscellaneous Capacity Building Sessions	Is	3	7	20	20	20	20	20	110	1,392.5	5	15.3	34.5	96.3	93.1	91.6	90.2	90.2	511.3
Subtotal												49,617.9	80,018.0	78,181.8	105,795.1	128,922.0	126,875.6	126,875.6	696,286.0
2. VOs Capacity Building																			
Climate Adaptation /b	Sessions	30	50	50	70	100	100	100	500	8,355	30	918.0	1,479.5	1,444.4	1,955.9	2,749.1	2,705.4	2,705.4	13,957.8
Nutritious Value Chain	Sessions	30	50	50	70	100	100	100	500	8,355	30	918.0	1,479.5	1,444.4	1,955.9	2,749.1	2,705.4	2,705.4	13,957.8
WASH	Sessions	30	50	50	70	100	100	100	500	8,355	30	918.0	1,479.5	1,444.4	1,955.9	2,749.1	2,705.4	2,705.4	13,957.8
Gender and Women Empowerment	Sessions	30	50	50	70	100	100	100	500	8,355	30	918.0	1,479.5	1,444.4	1,955.9	2,749.1	2,705.4	2,705.4	13,957.8
Subtotal												3,672.0	5,918.1	5,777.7	7,823.6	10,996.3	10,821.7	10,821.7	55,831.1
Subtotal												53,289.9	85,936.1	83,959.5	113,618.7	139,918.2	137,697.3	137,697.3	752,117.0
B. Institutional Support																			
1. Agriculture Extension and Reasearch /c																			
Office Equipment Material /d	Is	1	-	-	-	-	-	-	1	55,700,000	200,000	204,000.0	-	-	-	-	-	-	204,000.0
Operational Cost /e	months	12	12	12	6	6	6	6	60	2,785,000	10,000	122,400.0	118,362.5	115,553.9	55,882.6	54,981.3	54,108.6	54,108.6	575,397.5
Subtotal												326,400.0	118,362.5	115,553.9	55,882.6	54,981.3	54,108.6	54,108.6	779,397.5
2. Livestock and Fisheries Development																			
Office Equipment Material /f	Is	1	-	-	-	-	-	-	1	55,700,000	200,000	204,000.0	-	-	-	-	-	-	204,000.0
Operational Cost /g	Months	12	12	12	6	6	6	6	60	2,785,000	10,000	122,400.0	118,362.5	115,553.9	55,882.6	54,981.3	54,108.6	54,108.6	575,397.5
Subtotal												326,400.0	118,362.5	115,553.9	55,882.6	54,981.3	54,108.6	54,108.6	779,397.5
Subtotal												652,800.0	236,725.0	231,107.8	111,765.2	109,962.6	108,217.1	108,217.1	1,558,794.9
C. 4P Development																			
1. 4P Proposal Development																			
Private Sector Investment in 4Ps /h	Is	-	-	4	4	4	4	4	20	27,850,000	100,000	-	-	385,179.7	372,550.8	366,541.9	360,723.8	360,723.8	1,845,720.0
4P Matching Grant /i	Is	-	2	2	1	1	1	1	8	27,850,000	100,000	-	197,270.8	192,589.8	93,137.7	91,635.5	90,181.0	90,181.0	754,995.8
Subtotal												-	197,270.8	577,769.5	465,688.5	458,177.4	450,904.8	450,904.8	2,600,715.8
Total												706,089.9	519,931.9	892,836.8	691,072.5	708,058.2	696,819.2	696,819.2	4,911,627.7

/a On average 10 VOs per Union Councils and 10 interest groups per VO

/b On climate adapted crops, high nutrition crops, high value crops, processing/value addition, water use efficiency, kitchen gardening, etc

/c Inputs to be decided on the basis of detailed review and comprehensive proposal submitted to PMU

/d For seven tehsil offices, 3 district

/e TA/DA of and mobility of Seconded Staff

/f For seven tehsil offices, 3 district

/g TA/DA of and mobility of Seconded Staff

/h For advertisement, investor Conferences and other related Activities

/i 50% contribution and is from IFAD and 50% is by the private sector partners

Final project design report

Appendix 3: Project Cost Financing: Detail costs tables

Islamic Republic of Pakistan
Sindh Coastal Resilience Project
Table 1.1. Transformation of Incomes Opportunities - Financing GaP

Detailed Costs	Unit	Quantities							Total	Unit Cost (US\$)	Totals Including Contingencies (US\$)							Total
		2025	2026	2027	2028	2029	2030	2031			2025	2026	2027	2028	2029	2030	2031	
I. Investment Costs																		
A. Value Chain Support																		
1. Targeting, Community Mobilization and VO formation																		
VO Formation and Umbrella Plans /a	number	-	-	-	-	50	50	50	150	30	-	-	-	-	1,374.5	1,352.7	1,352.7	4,080.0
B. Institutional Support																		
1. Agriculture Extension and Reasearch /b																		
Operational Cost /c	months	-	-	-	6	6	6	6	24	10,000	-	-	-	55,882.6	54,981.3	54,108.6	54,108.6	219,081.1
2. Livestock and Fisheries Development																		
Operational Cost /d	Months	-	-	-	6	6	6	6	24	10,000	-	-	-	55,882.6	54,981.3	54,108.6	54,108.6	219,081.1
Subtotal											-	-	-	111,765.2	109,962.6	108,217.1	108,217.1	438,162.1
C. 4P Development																		
1. 4P Proposal Development																		
4P Matching Grant /e	Is	-	-	-	3	3	3	3	12	100,000	-	-	-	279,413.1	274,906.5	270,542.9	270,542.9	1,095,405.3
Total											-	-	-	391,178.4	386,243.6	380,112.7	380,112.7	1,537,647.4

/a On average 10 VOs per Union Councils and 10 interest groups per VO

/b Inputs to be decided on the basis of detailed review and comprehensive proposal submitted to PMU

/c TA/DA of and mobility of Seconded Staff

/d TA/DA of and mobility of Seconded Staff

/e 50% contribution and is from IFAD and 50% is by the private sector partners

Final project design report

Appendix 3: Project Cost Financing: Detail costs tables

Islamic Republic of Pakistan
Sindh Coastal Resilience Project
Table 1.20. Community/Value Chain Infrastructure
Detailed Costs

Unit	Quantities								Unit Cost (PKR)	Unit Cost (US\$)	Totals Including Contingencies (US\$)									
	2025	2026	2027	2028	2029	2030	2031	Total			Total	2025	2026	2027	2028	2029	2030	2031	Total	
I. Investment Costs																				
A. Rural Roads and Landing Sites																				
Design and Construction Cost	km	-	12	9	5	-	-	-	26	27,850,000	100,000	738,582,000.0	-	1,183,625.0	866,654.2	465,688.5	-	-	-	2,515,967.8
B. Solar Powered RO Plants /a	Schemes	-	15	15	15	15	-	-	60	2,785,000	10,000	212,831,221.0	-	168,008.6	175,126.7	179,566.5	187,143.9	-	-	709,845.6
C. Irrigation Efficiency																				
On-farm Irrigation Improvements /b	Schemes	9	9	9	9	9	-	-	45	8,355,000	30,000	375,975,000.0	270,000.0	261,093.8	254,898.3	246,541.0	242,564.5	-	-	1,275,097.6
Storage Pond	Schemes	15	15	15	15	15	15	-	90	5,570,000	20,000	511,326,000.0	306,000.0	295,906.3	288,884.7	279,413.1	274,906.5	270,542.9	-	1,715,653.4
On-farm Drainage	Schemes	9	9	9	9	9	8	-	53	2,785,000	10,000	150,557,100.0	91,800.0	88,771.9	86,665.4	83,823.9	82,471.9	72,144.8	-	505,677.9
Subtotal												1,037,858,100.0	667,800.0	645,771.9	630,448.5	609,778.0	599,942.9	342,687.6	-	3,496,428.9
D. Sanitation Improvement																				
Household Latrines /c	Household	500	1,000	2,000	1,000	1,000	1,000	1,000	7,500	97,475	350	745,683,750.0	178,500.0	345,224.0	674,064.4	325,982.0	320,724.2	315,633.3	315,633.3	2,475,761.2
E. Street Pavement																				
Bricks Soling	km	-	6	12	6	6	6	-	36	3,063,500	11,000	112,491,720.0	-	65,099.4	127,109.3	61,470.9	60,479.4	59,519.4	-	373,678.4
Tuftile Pavement	km	-	6	12	6	6	6	-	36	5,013,000	18,000	184,077,360.0	-	106,526.3	207,997.0	100,588.7	98,966.3	97,395.4	-	611,473.7
Subtotal												296,569,080.0	-	171,625.6	335,106.3	162,059.6	159,445.7	156,914.9	-	985,152.1
F. Household Solar Power /d	Units	500	500	1,000	500	500	340	250	3,590	83,550	300	305,943,390.0	153,000.0	147,953.1	288,884.7	139,706.6	137,453.2	91,984.6	67,635.7	1,026,617.9
G. Value Chain Support																				
Aggregation/Grading Platform	numbers	-	3	3	3	3	3	-	15	2,228,000	8,000	34,088,400.0	-	23,672.5	23,110.8	22,353.0	21,992.5	21,643.4	-	112,772.3
Crops Processing and packaging Equipment	numbers	-	15	27	30	30	30	30	162	2,785,000	10,000	460,193,400.0	-	147,953.1	259,996.3	279,413.1	274,906.5	270,542.9	270,542.9	1,503,354.7
Fish Catch Packaging/Marketing Support	numbers	-	6	7	7	7	7	-	34	2,785,000	10,000	96,583,800.0	-	59,181.3	67,406.4	65,196.4	64,144.8	63,126.7	-	319,055.6
Crab/Fish/Shrimp Rearing Pond /e	numbers	-	30	30	30	30	29	-	149	1,671,000	6,000	253,958,580.0	-	177,543.8	173,330.8	167,647.9	164,943.9	156,914.9	-	840,381.2
Fish landing Site Infrastructure /f	sites	-	5	5	5	5	5	-	25	13,925,000	50,000	355,087,500.0	-	246,588.5	240,737.3	232,844.3	229,088.7	225,452.4	-	1,174,711.2
Subtotal												1,199,911,680.0	-	654,939.2	764,581.6	767,454.7	755,076.4	737,680.2	270,542.9	3,950,274.9
Total												4,537,379,221.0	999,300.0	3,317,147.4	3,734,866.5	2,650,235.8	2,159,786.3	1,644,900.6	653,811.9	15,160,048.5

^a 1500 Lt output per day and plant rooms boring and solar power supply

^b The average cost is estimated at \$1000 per acre and include innovative high efficiency irrigation and water saving technologies

^c For BISP beneficiaries poor household

^d 500 WATT per household unit including wearing battery, two lights, fan etc. priority BISP beneficiary households

^e Each pond is one acre including a support package. 30 pond in Thatta district 20 in Sujawal and 10 in Badin. linked to private sector buyers/proceors

^f Provision of missing facilities (energy provision ,water supply, sorting platforms, cold chain improvement etc.)

Islamic Republic of Pakistan
Sindh Coastal Resilience Project
Table 1.21. Community/Value Chain Infrastructure - Financing Gap

Detailed Costs	Unit	Quantities							Unit Cost (PKR)	Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2025	2026	2027	2028	2029	2030	2031			Total	2025	2026	2027	2028	2029	2030	2031	Total
I. Investment Costs																			
A. Rural Roads and Landing Sites																			
Design and Construction Cost	km	-	-	-	15	15	-	-	30	27,850,000	100,000	-	-	-	1,397,065.6	1,374,532.3	-	-	2,771,597.8
B. Solar Powered RO Plants /a	Schemes	-	-	-	21	21	21	21	84	3,063,500	11,000	-	-	-	276,532.3	288,201.5	300,463.2	318,106.1	1,183,303.2
C. Irrigation Efficiency																			
On-farm Irrigation Improvements /b	Schemes	-	-	-	90	90	90	90	360	8,355,000	30,000	-	-	-	2,465,409.8	2,425,645.2	2,387,142.9	2,387,142.9	9,665,340.7
Storage Pond	Schemes	-	-	-	24	24	24	24	96	5,570,000	20,000	-	-	-	447,061.0	439,850.3	432,868.6	432,868.6	1,752,648.4
On-farm Drainage	Schemes	-	-	-	12	12	-	-	36	3,063,500	11,000	-	-	-	122,941.8	120,958.8	119,038.9	-	362,939.5
Subtotal												-	-	-	3,035,412.6	2,986,454.3	2,939,050.3	2,820,011.4	11,780,928.6
D. Sanitation Improvement																			
Household Latrines /c	Household	-	-	-	1,000	1,000	1,000	1,000	4,000	97,475	350	-	-	-	325,982.0	320,724.2	315,633.3	315,633.3	1,277,972.8
E. Household Solar Power /d	Units	-	-	-	500	500	250	250	1,500	83,550	300	-	-	-	139,706.6	137,453.2	67,635.7	67,635.7	412,431.2
F. Value Chain Support																			
Aggregation/Grading Platform	numbers	-	-	-	25	25	25	100	2,228,000	8,000	-	-	-	186,275.4	183,271.0	180,361.9	180,361.9	730,270.2	
Crops Processing and packaging Equipment	numbers	-	-	-	9	9	9	36	2,785,000	10,000	-	-	-	83,823.9	82,471.9	81,162.9	81,162.9	328,621.6	
Fish Catch Packaging/Marketing Support	numbers	-	-	-	6	6	6	24	2,785,000	10,000	-	-	-	55,882.6	54,981.3	54,108.6	54,108.6	219,081.1	
Crab/Fish/Shrimp Rearing Pond /e	numbers	-	-	9	9	9	9	-	1,671,000	6,000	-	-	51,999.3	50,294.4	49,483.2	48,697.7	-	200,474.5	
Fish landing Site Infrastructure /f	sites	-	-	-	3	3	-	-	13,925,000	50,000	-	-	-	139,706.6	137,453.2	135,271.4	-	412,431.2	
Subtotal												-	-	51,999.3	515,982.9	507,660.6	499,602.5	315,633.3	1,890,878.5
Total												-	-	51,999.3	5,690,681.9	5,615,026.1	4,122,385.1	3,837,019.9	19,317,112.2

\a 1500 Lt output per day and plant rooms boring and solar power supply

\b The average cost is estimated at \$1000 per acre and include innovative high efficiency irrigation and water saving technologies

\c For BISP beneficiaries poor household

\d 500 WATT per household unit including wearing battery, two lights, fan etc. priority BISP beneficiary households

\e Each pond is one acre including a support package. 30 pond in Thatta district 20 in Sujawal and 10 in Badin. linked to private scetor buyers/proceors

\f Provision of missing facilities (energy provision ,water supply, sorting platfarms, cold chain improvement etc.)

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Sindh Coastal Resilience Project
Table 1.30. Financial Inclusion

Detailed Costs	Unit	Quantities							Unit Cost (PKR)	Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2025	2026	2027	2028	2029	2030	2031			Total	2025	2026	2027	2028	2029	2030	2031	Total
I. Investment Costs																			
A. Capacity Building for Financial Inclusion																			
Interest Group Financial Literacy Training	Group	30	70	150	50	-	-	-	300	100	0.359	10.8	24.3	50.8	16.4	-	-	102.3	
Credit Delivery Staff Training	Group	30	70	150	50	-	-	-	300	30,000	107.72	3,231.6	7,291.7	15,254.2	4,918.0	-	-	30,695.5	
Subtotal												3,242.4	7,316.0	15,305.1	4,934.4	-	-	30,797.9	
B. Credit Subsidies /a																			
Credit subsidy - onfarm/fisheries	Loan	3,000	6,000	13,500	6,250	5,000	5,000	-	38,750	43,400	155.835	495,905.4	1,054,279.6	2,478,200.9	1,177,944.8	984,176.7	1,028,121.0	-	7,218,628.4
Credit subsidy- - second Loan - onfarm/fisheries	Loan	-	3,000	6,000	6,750	6,250	5,000	-	27,000	43,400	155.835	-	527,139.8	1,101,422.6	1,272,180.4	1,230,220.9	1,028,121.0	-	5,159,084.7
Credit subsidies - nonfarm /b	LS											3,000,000.0	-	-	-	-	-	-	3,000,000.0
Subtotal												3,495,905.4	1,581,419.4	3,579,623.6	2,450,125.2	2,214,397.5	2,056,241.9	-	15,377,713.0
C. Loan Scheme																			
Loan Scheme - 1st/2nd Cycle - Participating Banks /c	Credit Line											4,984,066.2	5,206,742.8	5,687,816.8	3,390,439.3	3,208,552.5	3,491,715.1	-	25,969,332.8
Total												8,483,214.0	6,795,478.2	9,282,745.5	5,845,498.9	5,422,950.0	5,547,957.0	-	41,377,843.7

^a The loan subsidy scheme is open to agriculture, fisheries and non-farm sectors as per demand

^b Subsidies for the credit to graduates of vocational training programme for self-employment/entrepreneurship promotion

^c Bank provide loans under the subsidy by project - the difference over and above 15% interest rate and upto a maximum of 20% of the interest payable by the project. The number of loans disbursed are; 3,000; 8,550; 11,700; 13,600; 13,000; and 15,900 per year

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Sindh Coastal Resilience Project
Table 1.31. Financial Inclusion - Financing Gap

Detailed Costs	Unit	Quantities							Unit Cost (PKR)	Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2025	2026	2027	2028	2029	2030	2031			Total	2025	2026	2027	2028	2029	2030	2031	Total
I. Investment Costs																			
A. Capacity Building for Financial Inclusion																			
Interest Group Financial Literacy Training	Group	-	-	-	100	100	-	-	200	100	0.359	-	-	-	32.8	32.3	-	-	65.0
Credit Delivery Staff Training	Group	-	-	-	100	100	-	-	200	100	0.359	-	-	-	32.8	32.3	-	-	65.0
Subtotal												-	-	-	65.6	64.5	-	-	130.1
B. Credit Subsidies /a																			
First Loan - 1st Cycle - Interest Subsidy	Loan	-	-	-	6,250	5,000	5,000	-	16,250	43,400	155.835	-	-	-	1,177,944.8	984,176.7	1,028,121.0	-	3,190,242.4
Second Loan - 2nd Cycle - Subsidy on Interest	Loan	-	-	-	6,750	6,250	5,000	-	18,000	43,400	155.835	-	-	-	1,272,180.4	1,230,220.9	1,028,121.0	-	3,530,522.2
Subtotal												-	-	-	2,450,125.2	2,214,397.5	2,056,241.9	-	6,720,764.6
C. Loan Scheme																			
Loan Scheme - Participating Banks /b	Credit Line											-	-	-	9,734,174.6	6,290,659.8	11,138,327.2	-	27,163,161.6
Total												-	-	-	12,184,365.4	8,505,121.9	13,194,569.1	-	33,884,056.4

^a The loan subsidy scheme is open to agriculture, fisheries and non-farm sectors as per demand

^b Bank provide loans under the subsidy scheme - difference of interest over and above 15% upto a maximum of 20% of the interest payable by the project. The project will provide 7,500; 10,500; 16,250 loans (1st and 2nd cycle) during year 4, 5 and 6 respectively

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Table 1.40. Challenge fund and policy support

Detailed Costs

Unit	Totals Including Contingencies (US\$)							Total
	2025	2026	2027	2028	2029	2030	2031	
I. Investment Costs								
A. Challenge fund and policy support								
1. Challenge Fund								
Crop Residues Disposal Pilots /a	Is	-	241,753.5	-	-	-	-	241,753.5
Aquaculture Feed Preparation Pilots	Is	200,000.0	193,402.8	-	-	-	-	393,402.8
Adaptation of Cropping Pattern - Pilots	Is	-	-	236,016.9	-	-	-	236,016.9
Adaptive Pilot of Saline Agriculture	Is	-	-	188,813.6	-	-	-	188,813.6
Subtotal		200,000.0	435,156.3	424,830.5	-	-	-	1,059,986.8
2. Policy Analysis and Reforms /b	Is	-	-	283,220.3	-	-	-	283,220.3
Total		200,000.0	435,156.3	708,050.8	-	-	-	1,343,207.1

/a Innovative ways of crop disposal/recycling

/b Identified by the project during the implementation through policy reforms agenda

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Sindh Coastal Resilience Project
Table 1.41. Challenge fund and policy support - Financing Gap

Detailed Costs

Unit	Totals Including Contingencies (US\$)							Total
	2025	2026	2027	2028	2029	2030	2031	
I. Investment Costs								
A. Challenge fund and policy support								
1. Challenge Fund								
Crop Residues Disposal Pilots /a	Is	-	-	228,278.7	224,596.8	221,031.7	-	673,907.2
Aquaculture Feed Preparation Pilots	Is	-	-	182,623.0	179,677.4	-	-	362,300.4
Adaptation of Cropping Pattern - Pilots	Is	-	-	182,623.0	179,677.4	-	-	362,300.4
Adaptive Pilot of Saline Agriculture	Is	-	-	182,623.0	179,677.4	-	-	362,300.4
Subtotal		-	-	776,147.5	763,629.0	221,031.7	-	1,760,808.3
2. Policy Analysis and Reforms /b	Is	-	-	319,590.2	44,919.4	-	-	364,509.5
Total		-	-	1,095,737.7	808,548.4	221,031.7	-	2,125,317.8

/a Innovative ways of crop disposal/recycling

/b Identified by the project during the implementation through policy reforms agenda

Final project design report

Appendix 3: Project Cost Financing: Detail costs tables

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Sindh Coastal Resilience Project
Table 2.10. Economic and Social Inclusion

Detailed Costs	Unit	Quantities							Unit Cost (PKR)	Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2025	2026	2027	2028	2029	2030	2031			Total	2025	2026	2027	2028	2029	2030	2031	Total
I. Investment Costs																			
A. Economic Graduation of Landless Poor																			
1. Labour Market Survey	ls	1	-	-	-	-	-	-	1	5,570,000	20,000	20,400.0	-	-	-	-	-	20,400.0	
2. Household Livelihood Plans																			
Livelihood Improvement Plan Preparation and Asset Prevision /a	household	1,000	3,000	7,000	5,000	3,500	1,000	-	20,500			-	-	-	-	-	-	-	
Training of Beneficiaries for Asset Management /b	Household	1,000	3,000	7,000	1,250	750	250	-	13,250	13,925	50	51,000.0	147,953.1	337,032.2	58,211.1	34,363.3	11,272.6	639,832.3	
Subtotal												51,000.0	147,953.1	337,032.2	58,211.1	34,363.3	11,272.6	639,832.3	
3. Asset Provision																			
Livestock Asset	Household	1,000	2,500	3,000	500	500	500	200	8,200	139,250	500	510,000.0	1,232,942.7	1,444,423.7	232,844.3	229,088.7	225,452.4	90,181.0	3,964,932.7
Service Provision Assets	household	200	500	1,000	600	750	200	200	3,450	83,550	300	61,200.0	147,953.1	288,884.7	167,647.9	206,179.8	54,108.6	54,108.6	980,082.7
Crafts/manufacturing Assets	household	700	700	700	200	200	200	200	2,900	83,550	300	214,200.0	207,134.4	202,219.3	55,882.6	54,981.3	54,108.6	54,108.6	842,634.8
Land lease and Cultivation Package	household	900	900	900	900	900	900	300	5,700	139,250	500	459,000.0	443,859.4	433,327.1	419,119.7	412,359.7	405,814.3	135,271.4	2,708,751.6
Other	household	1,000	1,000	1,000	1,000	1,000	90	6,090	55,700	200	204,000.0	197,270.8	192,589.8	186,275.4	183,271.0	180,361.9	16,232.6	1,160,001.5	
Subtotal												1,448,400.0	2,229,160.4	2,561,444.7	1,061,769.8	1,085,880.5	919,845.7	349,902.1	9,656,403.3
Subtotal												1,519,800.0	2,377,113.5	2,898,476.9	1,119,980.9	1,120,243.8	931,118.3	349,902.1	10,316,635.6
B. Job Market Integration of Youth																			
1. Job Market Integration of Youth																			
Vocational Training for Employment	Persons	1,500	3,000	2,500	2,000	2,000	1,000	-	12,000	55,700	200	300,000.0	580,208.3	472,033.9	365,245.9	359,354.8	176,825.4	-	2,253,668.4
Vocational Training for Self-enterprise	persons	1,500	3,000	3,000	3,000	3,000	3,000	500	17,000	55,700	200	300,000.0	580,208.3	566,440.7	547,868.9	539,032.3	530,476.2	88,412.7	3,152,439.0
Start up Grants for Self-enterprises	Persons	1,500	3,000	3,000	3,000	3,000	3,000	500	17,000	83,550	300	450,000.0	870,312.5	849,661.0	821,803.3	808,548.4	795,714.3	132,619.0	4,728,658.5
Subtotal												1,050,000.0	2,030,729.2	1,888,135.6	1,734,918.0	1,706,935.5	1,503,015.9	221,031.7	10,134,765.9
C. Institutional Support to STEVTA																			
1. Intiutional Support STEVTA																			
Training Facility Up-grades /c	ls	4	-	-	-	-	-	-	4	27,850,000	100,000	400,000.0	-	-	-	-	-	-	400,000.0
Training of STEVTA Trainers	Persons	50	-	-	-	-	-	-	50	1,392,500	5,000	250,000.0	-	-	-	-	-	-	250,000.0
Curriculum Development	ls	12	-	-	-	-	-	-	12	2,785,000	10,000	120,000.0	-	-	-	-	-	-	120,000.0
Training facility/logistics Costs	Sessions	20	30	50	50	50	50	20	270	501,300	1,800	36,000.0	52,218.8	84,966.1	82,180.3	80,854.8	79,571.4	31,828.6	447,620.0
Additional Service Provider	ls											1,000.0	1,450.5	1,888.1	2,282.8	1,347.6	884.1	884.1	9,737.3
Subtotal												807,000.0	53,669.3	86,854.2	84,463.1	82,202.4	80,455.6	32,712.7	1,227,357.3
Total												3,376,800.0	4,461,512.0	4,873,466.8	2,939,362.0	2,909,381.7	2,514,589.8	603,646.5	21,678,758.8

1a For BISP Beneficiaries

1b Stipend to Beneficiaries for lost wage labour opprtunity

1c 3 for each district

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Sindh Coastal Resilience Project
Table 2.11. Economic and Social Inclusion - Financing Gap
Detailed Costs

	Unit	Quantities							Unit Cost (PKR)	Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2025	2026	2027	2028	2029	2030	2031			Total	2025	2026	2027	2028	2029	2030	2031	Total
I. Investment Costs																			
A. Economic Graduation of Landless Poor																			
1. Household Livelihood Plans																			
Training of Beneficiaries for Asset Management /a	Household	-	-	-	5,000	5,750	1,000	-	11,750	13,925	50	-	-	-	232,844.3	263,452.0	45,090.5	-	541,386.8
2. Asset Provision																			
Livestock Asset	Household	-	-	-	1,800	1,800	1,800	1,800	7,200	139,250	500	-	-	-	838,239.3	824,719.4	811,628.6	811,628.6	3,286,215.8
Service Provision Assets	household	-	-	-	600	800	800	800	3,000	83,550	300	-	-	-	167,647.9	219,925.2	216,434.3	216,434.3	820,441.6
Crafts/manufacturing Assets	household	-	-	-	500	500	500	500	2,000	83,550	300	-	-	-	139,706.6	137,453.2	135,271.4	135,271.4	547,702.6
Land lease and Cultivation Package	household	-	-	-	700	700	700	700	2,800	139,250	500	-	-	-	325,982.0	320,724.2	315,633.3	315,633.3	1,277,972.8
Other	household	-	-	-	150	150	150	107.641	557.641	55,700	200	-	-	-	27,941.3	27,490.6	27,054.3	19,414.3	101,900.6
Subtotal		-	-	-								-	-	-	1,499,517.0	1,530,312.6	1,506,021.9	1,498,382.0	6,034,233.5
3. Household Livelihood Plans																			
Land lease and Cultivation Package	household	-	-	-	425	425	425	425	1,700	139,250	500	-	-	-	197,917.6	194,725.4	191,634.5	191,634.5	775,912.1
Other	household	-	-	-	100	100	100	100	400	55,700	200	-	-	-	18,627.5	18,327.1	18,036.2	18,036.2	73,027.0
Subtotal		-	-	-								-	-	-	216,545.2	213,052.5	209,670.7	209,670.7	848,939.1
Subtotal		-	-	-								-	-	-	1,948,906.5	2,006,817.1	1,760,783.1	1,708,052.7	7,424,559.3
B. Job Market Integration of Youth																			
1. Job Market Integration of Youth																			
Vocational Training for Employment	Persons	-	-	-	3,000	4,000	4,500	2,000	13,500	55,700	200	-	-	-	547,868.9	718,709.7	795,714.3	353,650.8	2,415,943.6
Vocational Training for Self-enterprise	persons	-	-	-	1,850	1,500	1,500	250	5,100	55,700	200	-	-	-	337,852.5	269,516.1	265,238.1	44,206.3	916,813.0
Start up Grants for Self-enterprises	Persons	-	-	-	1,850	1,500	1,500	250	5,100	83,550	300	-	-	-	506,778.7	404,274.2	397,857.1	66,309.5	1,375,219.5
Subtotal		-	-	-								-	-	-	1,392,500.0	1,392,500.0	1,458,809.5	464,166.7	4,707,976.2
C. Intiutional Support STEVTA																			
1. Intiutional Support STEVTA																			
Training Facility Up-grades /b	ls	-	-	-	5	-	-	-	5	27,850,000	100,000	-	-	-	456,557.4	-	-	-	456,557.4
Total		-	-	-								-	-	-	3,797,963.9	3,399,317.1	3,219,592.6	2,172,219.3	12,589,092.9

\a Stipend to Beneficiaries for lost wage labour opprtunity
\b 3 for each district

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Table 3.10. Project Management & Implementation Support

Detailed Costs	Unit	Quantities							Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2025	2026	2027	2028	2029	2030	2031		Total	2025	2026	2027	2028	2029	2030	2031	Total
I. Investment Costs																		
A. Project Management Unit																		
1. Vehicles																		
Double Cabin Vehicles for PMU	No.	1	-	-	-	-	-	-	1	58,000	59,160	-	-	-	-	-	-	59,160
Car for PMU 13-1600 cc (2)	No.	2	-	-	-	-	-	-	2	21,500	43,860	-	-	-	-	-	-	43,860
Car for PMU 1000 cc (2)	No.	2	-	-	-	-	-	-	2	14,500	29,580	-	-	-	-	-	-	29,580
Motorcycles (2)	No.	2	-	-	-	-	-	-	2	575	1,173	-	-	-	-	-	-	1,173
Subtotal											133,773	-	-	-	-	-	-	133,773
2. Equipment																		
Furniture and Fixture	No	1	-	-	-	-	-	-	1	15,000	15,300	-	-	-	-	-	-	15,300
4 in 1 (Printer, Copier, Scanner & Fax)	No	1	-	-	-	-	-	-	1	1,800	1,836	-	-	-	-	-	-	1,836
Note books	No	7	-	-	-	-	-	-	7	900	6,426	-	-	-	-	-	-	6,426
Printers	No	3	-	-	-	-	-	-	3	430	1,316	-	-	-	-	-	-	1,316
LED Screen	No	1	-	-	-	-	-	-	1	1,790	1,826	-	-	-	-	-	-	1,826
Telephone Exchange	No	1	-	-	-	-	-	-	1	200	204	-	-	-	-	-	-	204
Digital Camera	No	2	-	-	-	-	-	-	2	534	1,088	-	-	-	-	-	-	1,088
Air Conditioners	No	6	-	-	-	-	-	-	6	720	4,406	-	-	-	-	-	-	4,406
Generator	No	1	-	-	-	-	-	-	1	3,800	3,876	-	-	-	-	-	-	3,876
Security Equipment	No	1	-	-	-	-	-	-	1	360	367	-	-	-	-	-	-	367
Refrigerator	No	1	-	-	-	-	-	-	1	540	551	-	-	-	-	-	-	551
Other office materials	Ls										1,072	-	-	-	-	-	-	1,072
Subtotal											38,268	-	-	-	-	-	-	38,268
3. Knowledge Management and Communication																		
Central Consultative Workshops for PMU	Ls	1	1	1	1	1	1	1	7	1,000	1,020	986	963	931	916	902	902	6,621
District Planing and Coordination workshops	NO	1	1	1	1	1	1	1	7	500	500	484	472	457	449	442	442	3,245
knowledge Sharing Events	Events	-	1	1	1	1	1	-	5	3,575	-	3,630	3,544	3,428	3,372	3,319	-	17,292
Subtotal											1,520	5,100	4,979	4,816	4,738	4,663	1,344	27,159
4. Impact Assessment Studies																		
Baseline Survey	Is	1	-	-	-	-	-	-	1	10,000	10,200	-	-	-	-	-	-	10,200
Impact Assessment	lumsum	-	-	3	3	3	3	3	15	715	-	-	2,066	1,998	1,966	1,934	1,934	9,898
Video Documentaries	No.	-	3	3	3	3	3	3	18	1,785	-	5,282	5,157	4,988	4,907	4,829	4,829	29,992
Mid term and End Term Assessment	No.	-	-	-	1	-	-	1	2	5,000	-	-	-	4,657	-	-	4,509	9,166
Project Completion Report	No	-	-	-	-	-	-	1	1	5,000	-	-	-	-	-	-	4,509	4,509
Subtotal											10,200	5,282	7,222	11,642	6,873	6,764	15,782	63,764
5. Software																		
a. MIS and M&E Portal	lumsum	1	-	-	-	-	-	-	1	2,000	2,040	-	-	-	-	-	-	2,040
b. Accounting Software	Lumsum	1	-	-	-	-	-	-	1	10,000	10,200	-	-	-	-	-	-	10,200
Subtotal											12,240	-	-	-	-	-	-	12,240
Subtotal											196,001	10,382	12,201	16,458	11,611	11,426	17,126	275,204

B. District Co-ordination Unit - Thatta																		
1. Equipment																		
Furniture and Fixture	No	1	-	-	-	-	-	-	1	8,000	8,160	-	-	-	-	8,160		
4 in 1 (Printer, Copier, Scanner & Fax)	No	1	-	-	-	-	-	-	1	1,800	1,836	-	-	-	-	1,836		
Note books	No	3	-	-	-	-	-	-	3	900	2,754	-	-	-	-	2,754		
Printers	No	3	-	-	-	-	-	-	3	430	1,316	-	-	-	-	1,316		
LED Screen	No	1	-	-	-	-	-	-	1	1,790	1,826	-	-	-	-	1,826		
Digital Camera	No	1	-	-	-	-	-	-	1	540	551	-	-	-	-	551		
Air Conditioners	No	3	-	-	-	-	-	-	3	720	2,203	-	-	-	-	2,203		
Generator	No	1	-	-	-	-	-	-	1	3,800	3,876	-	-	-	-	3,876		
Security Equipment	No	1	-	-	-	-	-	-	1	360	367	-	-	-	-	367		
Refrigerator	No	1	-	-	-	-	-	-	1	540	551	-	-	-	-	551		
Other office equipment	No	1	-	-	-	-	-	-	1	1,000	1,020	-	-	-	-	1,020		
Subtotal											24,460	-	-	-	-	24,460		
2. Vehicles																		
Double Cabin Vehicles for DCU (1)	No.	1	-	-	-	-	-	-	1	58,000	59,160	-	-	-	-	59,160		
Car for PMU 1000 cc (1)	No.	1	-	-	-	-	-	-	1	14,500	14,790	-	-	-	-	14,790		
Motorcycles (1)	No.	1	-	-	-	-	-	-	1	575	587	-	-	-	-	587		
Subtotal											74,537	-	-	-	-	74,537		
Subtotal											98,996	-	-	-	-	98,996		
C. District Co-ordination Unit - Badin																		
1. Equipment																		
Furniture and Fixture	No	1	-	-	-	-	-	-	1	8,000	8,160	-	-	-	-	8,160		
4 in 1 (Printer, Copier, Scanner & Fax)	No	1	-	-	-	-	-	-	1	1,800	1,836	-	-	-	-	1,836		
Note books	No	3	-	-	-	-	-	-	3	900	2,754	-	-	-	-	2,754		
Printers	No	3	-	-	-	-	-	-	3	430	1,316	-	-	-	-	1,316		
LED Screen	No	1	-	-	-	-	-	-	1	1,790	1,826	-	-	-	-	1,826		
Digital Camera	No	1	-	-	-	-	-	-	1	540	551	-	-	-	-	551		
Air Conditioners	No	3	-	-	-	-	-	-	3	720	2,203	-	-	-	-	2,203		
Generator	No	1	-	-	-	-	-	-	1	3,800	3,876	-	-	-	-	3,876		
Security Equipment	No	1	-	-	-	-	-	-	1	360	367	-	-	-	-	367		
Refrigerator	No	1	-	-	-	-	-	-	1	540	551	-	-	-	-	551		
Other office equipment	No	1	-	-	-	-	-	-	1	1,000	1,020	-	-	-	-	1,020		
Subtotal											24,460	-	-	-	-	24,460		
2. Vehicles																		
Double Cabin Vehicles for DCU (1)	No.	1	-	-	-	-	-	-	1	58,000	59,160	-	-	-	-	59,160		
Car for PMU 1000 cc (1)	No.	1	-	-	-	-	-	-	1	14,500	14,790	-	-	-	-	14,790		
Motorcycles (1)	No.	1	-	-	-	-	-	-	1	575	587	-	-	-	-	587		
Subtotal											74,537	-	-	-	-	74,537		
Subtotal											98,996	-	-	-	-	98,996		
D. District Co-ordination Unit - Sujawal																		
1. Equipment																		
Furniture and Fixture	No	1	-	-	-	-	-	-	1	8,000	8,160	-	-	-	-	8,160		
4 in 1 (Printer, Copier, Scanner & Fax)	No	1	-	-	-	-	-	-	1	1,800	1,836	-	-	-	-	1,836		
Note books	No	3	-	-	-	-	-	-	3	900	2,754	-	-	-	-	2,754		
Printers	No	3	-	-	-	-	-	-	3	430	1,316	-	-	-	-	1,316		
LED Screen	No	1	-	-	-	-	-	-	1	1,790	1,826	-	-	-	-	1,826		
Digital Camera	No	1	-	-	-	-	-	-	1	540	551	-	-	-	-	551		
Air Conditioners	No	3	-	-	-	-	-	-	3	720	2,203	-	-	-	-	2,203		
Generator	No	1	-	-	-	-	-	-	1	3,800	3,876	-	-	-	-	3,876		
Security Equipment	No	1	-	-	-	-	-	-	1	360	367	-	-	-	-	367		
Refrigerator	No	1	-	-	-	-	-	-	1	540	551	-	-	-	-	551		
Other office equipment	No	1	-	-	-	-	-	-	1	1,000	1,020	-	-	-	-	1,020		
Subtotal											24,460	-	-	-	-	24,460		
2. Vehicles																		
Double Cabin Vehicles for DCU (1)	No.	1	-	-	-	-	-	-	1	58,000	59,160	-	-	-	-	59,160		
Car for PMU 1000 cc (1)	No.	1	-	-	-	-	-	-	1	14,500	14,790	-	-	-	-	14,790		
Motorcycles (1)	No.	1	-	-	-	-	-	-	1	575	587	-	-	-	-	587		
Subtotal											74,537	-	-	-	-	74,537		
Subtotal											98,996	-	-	-	-	98,996		
Total Investment Costs											492,990	10,382	12,201	16,458	11,611	11,426	17,126	572,192

II. Recurrent Costs

A. Project Management Unit

1. Salaries and Allowances

a. Professional Staff

Project Director	Month	12	12	12	12	12	12	12	84	1,428	18,541	19,708	20,590	21,139	22,077	23,063	24,482	149,600
Value Chain Specialist	Month	12	12	12	6	6	6	6	60	1,071	13,905	14,781	15,442	7,927	8,279	8,649	9,181	78,164
Gender and Nutrition Specialist	Month	12	12	12	6	6	6	6	60	1,071	13,905	14,781	15,442	7,927	8,279	8,649	9,181	78,164
Climate Change and Adaption Specialist	Month	12	12	12	6	6	6	6	60	1,071	13,905	14,781	15,442	7,927	8,279	8,649	9,181	78,164
M&E Specialist	Month	12	12	12	6	6	6	6	60	1,071	13,905	14,781	15,442	7,927	8,279	8,649	9,181	78,164
M&E Officer	Month	12	12	12	12	12	12	12	84	715	9,283	9,868	10,309	10,584	11,054	11,548	12,258	74,905
Communication/Knowledge Management Specia	Month	12	12	12	6	6	6	6	60	1,071	13,905	14,781	15,442	7,927	8,279	8,649	9,181	78,164
Micor Finance Specialist	Month	12	12	12	6	6	6	6	60	1,071	13,905	14,781	15,442	7,927	8,279	8,649	9,181	78,164
Manager Finance and Accounts	Month	12	12	12	12	12	12	12	84	1,071	13,905	14,781	15,442	15,854	16,558	17,297	18,361	112,200
Procurement Specialist	Month	12	12	12	12	12	12	12	84	1,071	13,905	14,781	15,442	15,854	16,558	17,297	18,361	112,200
Manager Internal Audit	Month	12	12	12	6	6	6	6	60	535	6,946	7,384	7,714	3,960	4,136	4,320	4,586	39,046
Admin & Finance Assistant	Month	12	12	12	6	6	6	6	60	535	6,946	7,384	7,714	3,960	4,136	4,320	4,586	39,046
Offices Assistant	Month	12	12	12	6	6	6	6	60	714	9,270	9,854	10,295	5,285	5,519	5,766	6,120	52,110
Project Allowance - Division Accounts Officer	Staff	12	12	12	6	6	6	6	60	178	2,311	2,457	2,566	1,318	1,376	1,437	1,526	12,991

Subtotal

164,541 174,904 182,725 125,518 131,088 136,942 145,364 1,061,083

b. Support Staff

Drivers	Person-Months	60	60	60	60	60	60	60	420	178	11,555	12,283	12,832	13,175	13,760	14,374	15,258	93,238
Security Guards	Person-Months	36	36	36	36	36	36	36	252	143	5,570	5,921	6,186	6,351	6,632	6,929	7,355	44,943
Naib Qasid/Office Boy	Person-Months	36	36	36	36	36	36	36	252	143	5,570	5,921	6,186	6,351	6,632	6,929	7,355	44,943
Cleaner	Person-Months	12	12	12	12	12	12	12	84	143	1,857	1,974	2,062	2,117	2,211	2,310	2,452	14,981

Subtotal

24,552 26,098 27,265 27,993 29,236 30,541 32,419 198,105

Subtotal

189,093 201,003 209,991 153,511 160,324 167,483 177,783 1,259,187

2. Operating Cost - PMU

Office Rent	Month	12	12	12	12	12	12	12	84	1,250	16,229	17,252	18,023	18,504	19,325	20,188	21,430	130,952
Postage/ Courier	Month	12	12	12	12	12	12	12	84	36	467	497	519	533	557	581	617	3,771
Telephone/ Internet charges/ fax etc	Month	12	12	12	12	12	12	12	84	110	1,428	1,518	1,586	1,628	1,701	1,777	1,886	11,524
O&M/POL (Vehicles)	No	60	60	60	60	60	60	60	420	1,071	69,527	73,906	77,211	79,272	82,790	86,487	91,806	561,000
O&M/POL Motorcycles	No	24	24	24	24	24	24	24	168	286	7,427	7,894	8,247	8,468	8,843	9,238	9,806	59,924
O&M/POL Generator	No	12	12	12	12	12	12	12	84	714	9,270	9,854	10,295	10,570	11,039	11,532	12,241	74,800
Travel and Daily Allowance	Ls	12	12	12	12	12	12	12	84	715	9,283	9,868	10,309	10,584	11,054	11,548	12,258	74,905
Utility Charges	Ls	12	12	12	12	12	12	12	84	715	9,283	9,868	10,309	10,584	11,054	11,548	12,258	74,905
Publication and Advertisement	Ls										774	822	859	882	921	962	1,021	6,242
Bank Charges	Ls										39	41	43	44	46	48	51	314
Insurance	Ls										773	821	858	881	920	961	1,020	6,233
Other Operating Costs	Ls										386	411	429	440	460	480	510	3,117

Subtotal

124,887 132,753 138,689 142,392 148,711 155,351 164,905 1,007,687

3. Implementation Partners /a

% 1 1 1 1 1 1 1 7 459,786

288,000 483,507 755,254 438,295 344,531 339,063 339,063 2,987,713

Subtotal

601,980 817,263 1,103,934 734,198 653,566 661,896 681,750 5,254,587

B. District Coordination Unit - Thatta

1. Salaries and Allowances

a. Professional Staff

District Coordinator	Month	12	12	12	12	12	12	12	84	715	8,752	8,463	8,262	7,991	7,862	7,738	7,738	56,805
M&E Officer	Month	12	12	12	12	12	12	12	84	540	6,610	6,392	6,240	6,035	5,938	5,844	5,844	42,902
Value Chain Officer	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Admin & Finance Assistant	Month	12	12	12	6	6	6	6	60	360	4,406	4,261	4,160	2,012	1,979	1,948	1,948	20,714
Business Support Facilitator	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071

Subtotal

32,987	31,899	31,142	22,074	21,718	21,373	21,373	182,564
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b. Support Staff

Office Boy	Month	12	12	12	12	12	12	12	84	110	1,346	1,302	1,271	1,229	1,210	1,190	1,190	8,739
Driver (2)	Person-Months	24	24	24	24	24	24	24	168	130	3,182	3,077	3,004	2,906	2,859	2,814	2,814	20,656
Security Guard (2)	Person-Months	24	24	24	24	24	24	24	168	110	2,693	2,604	2,542	2,459	2,419	2,381	2,381	17,479
Cleaner	Month	12	12	12	12	12	12	12	84	110	1,346	1,302	1,271	1,229	1,210	1,190	1,190	8,739

Subtotal

8,568	8,285	8,089	7,824	7,697	7,575	7,575	55,613
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41,555	40,184	39,231	29,897	29,415	28,948	28,948	238,178
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2. Operating Cost - DCU Thatta

Office Rent	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Postage/ Courier	Month	12	12	12	6	6	6	6	60	40	490	473	462	224	220	216	216	2,302
Telephone/ Internet charges/ fax etc	Month	12	12	12	6	6	6	6	60	60	734	710	693	335	330	325	325	3,452
O&M,POL Cost for (Vehicles)	No	24	24	24	12	12	12	12	120	893	21,861	21,140	20,638	9,981	9,820	9,664	9,664	102,766
O&M,POL Cost for Motorcycles	No	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
O&M,POL Cost for Generator	No	12	12	12	6	6	6	6	60	715	8,752	8,463	8,262	3,996	3,931	3,869	3,869	41,141
Meetings and Conference	Ls	12	12	12	6	6	6	6	60	130	1,591	1,539	1,502	726	715	703	703	7,480
Stationery	Ls	12	12	12	6	6	6	6	60	360	4,406	4,261	4,160	2,012	1,979	1,948	1,948	20,714
Travel and Daily Allowance	Ls	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Utility Charges	Ls	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Other Operating Costs	Ls	1	1	1	0.5	0.5	0.5	0.5	5	360	367	355	347	168	165	162	162	1,726

Subtotal

64,639	62,507	61,024	29,512	29,036	28,575	28,575	303,867
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Subtotal

106,194	102,691	100,255	59,409	58,451	57,523	57,523	542,045
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C. District Coordination Unit - Badin

1. Salaries and Allowances

a. Professional Staff

District Coordinator	Month	12	12	12	12	12	12	12	84	715	8,752	8,463	8,262	7,991	7,862	7,738	7,738	56,805
M&E Officer	Month	12	12	12	12	12	12	12	84	540	6,610	6,392	6,240	6,035	5,938	5,844	5,844	42,902
Value Chain Officer	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Admin & Finance Assistant	Month	12	12	12	6	6	6	6	60	360	4,406	4,261	4,160	2,012	1,979	1,948	1,948	20,714
Business Support Facilitator	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071

Subtotal

32,987	31,899	31,142	22,074	21,718	21,373	21,373	182,564
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b. Support Staff

Office Boy	Month	12	12	12	12	12	12	12	84	110	1,346	1,302	1,271	1,229	1,210	1,190	1,190	8,739
Driver (2)	Person-Months	24	24	24	24	24	24	24	168	130	3,182	3,077	3,004	2,906	2,859	2,814	2,814	20,656
Security Guard (2)	Person-Months	24	24	24	24	24	24	24	168	110	2,693	2,604	2,542	2,459	2,419	2,381	2,381	17,479
Cleaner	Month	12	12	12	12	12	12	12	84	110	1,346	1,302	1,271	1,229	1,210	1,190	1,190	8,739

Subtotal

8,568	8,285	8,089	7,824	7,697	7,575	7,575	55,613
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41,555	40,184	39,231	29,897	29,415	28,948	28,948	238,178
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2. Operating Cost - DCU Thatta

Office Rent	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Postage/ Courier	Month	12	12	12	6	6	6	6	60	40	490	473	462	224	220	216	216	2,302
Telephone/ Internet charges/ fax etc	Month	12	12	12	6	6	6	6	60	60	734	710	693	335	330	325	325	3,452
O&M,POL Cost for (Vehicles)	No	24	24	24	12	12	12	12	120	893	21,861	21,140	20,638	9,981	9,820	9,664	9,664	102,766
O&M,POL Cost for Motorcycles	No	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
O&M,POL Cost for Generator	No	12	12	12	6	6	6	6	60	715	8,752	8,463	8,262	3,996	3,931	3,869	3,869	41,141
Meetings and Conference	Ls	12	12	12	6	6	6	6	60	130	1,591	1,539	1,502	726	715	703	703	7,480
Stationery	Ls	12	12	12	6	6	6	6	60	360	4,406	4,261	4,160	2,012	1,979	1,948	1,948	20,714
Travel and Daily Allowance	Ls	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Utility Charges	Ls	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Other Operating Costs	Ls	1	1	1	0.5	0.5	0.5	0.5	5	360	367	355	347	168	165	162	162	1,726

Subtotal

64,639	62,507	61,024	29,512	29,036	28,575	28,575	303,867
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Subtotal

106,194	102,691	100,255	59,409	58,451	57,523	57,523	542,045
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D. District Coordination Unit - Sajawal																		
1. Salaries and Allowances																		
a. Professional Staff																		
District Coordinator	Month	12	12	12	12	12	12	12	84	715	8,752	8,463	8,262	7,991	7,862	7,738	7,738	56,805
M&E Officer	Month	12	12	12	12	12	12	12	84	540	6,610	6,392	6,240	6,035	5,938	5,844	5,844	42,902
Value Chain Officer	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Admin & Finance Assistant	Month	12	12	12	6	6	6	6	60	360	4,406	4,261	4,160	2,012	1,979	1,948	1,948	20,714
Business Support Facilitator	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Subtotal											<u>32,987</u>	<u>31,899</u>	<u>31,142</u>	<u>22,074</u>	<u>21,718</u>	<u>21,373</u>	<u>21,373</u>	<u>182,564</u>
b. Support Staff																		
Office Boy	Month	12	12	12	12	12	12	12	84	110	1,346	1,302	1,271	1,229	1,210	1,190	1,190	8,739
Driver (2)	Person-Months	24	24	24	24	24	24	24	168	130	3,182	3,077	3,004	2,906	2,859	2,814	2,814	20,656
Security Guard (2)	Person-Months	24	24	24	24	24	24	24	168	110	2,693	2,604	2,542	2,459	2,419	2,381	2,381	17,479
Cleaner	Month	12	12	12	12	12	12	12	84	110	1,346	1,302	1,271	1,229	1,210	1,190	1,190	8,739
Subtotal											<u>8,568</u>	<u>8,285</u>	<u>8,089</u>	<u>7,824</u>	<u>7,697</u>	<u>7,575</u>	<u>7,575</u>	<u>55,613</u>
Subtotal											<u>41,555</u>	<u>40,184</u>	<u>39,231</u>	<u>29,897</u>	<u>29,415</u>	<u>28,948</u>	<u>28,948</u>	<u>238,178</u>
2. Operating Cost - DCU Thatta																		
Office Rent	Month	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Postage/ Courier	Month	12	12	12	6	6	6	6	60	40	490	473	462	224	220	216	216	2,302
Telephone/ Internet charges/ fax etc	Month	12	12	12	6	6	6	6	60	60	734	710	693	335	330	325	325	3,452
O&M,POL Cost for (Vehicles)	No	24	24	24	12	12	12	12	120	893	21,861	21,140	20,638	9,981	9,820	9,664	9,664	102,766
O&M,POL Cost for Motorcycles	No	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
O&M,POL Cost for Generator	No	12	12	12	6	6	6	6	60	715	8,752	8,463	8,262	3,996	3,931	3,869	3,869	41,141
Meetings and Conference	Ls	12	12	12	6	6	6	6	60	130	1,591	1,539	1,502	726	715	703	703	7,480
Stationery	Ls	12	12	12	6	6	6	6	60	360	4,406	4,261	4,160	2,012	1,979	1,948	1,948	20,714
Travel and Daily Allowance	Ls	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Utility Charges	Ls	12	12	12	6	6	6	6	60	540	6,610	6,392	6,240	3,018	2,969	2,922	2,922	31,071
Other Operating Costs	Ls	1	1	1	0.5	0.5	0.5	0.5	5	360	367	355	347	168	165	162	162	1,726
Subtotal											<u>64,639</u>	<u>62,507</u>	<u>61,024</u>	<u>29,512</u>	<u>29,036</u>	<u>28,575</u>	<u>28,575</u>	<u>303,867</u>
Subtotal											<u>106,194</u>	<u>102,691</u>	<u>100,255</u>	<u>59,409</u>	<u>58,451</u>	<u>57,523</u>	<u>57,523</u>	<u>542,045</u>
Total Recurrent Costs											<u>920,562</u>	<u>1,125,337</u>	<u>1,404,698</u>	<u>912,424</u>	<u>828,918</u>	<u>834,465</u>	<u>854,319</u>	<u>6,880,723</u>
Total											<u>1,413,552</u>	<u>1,135,718</u>	<u>1,416,899</u>	<u>928,882</u>	<u>840,529</u>	<u>845,891</u>	<u>871,444</u>	<u>7,452,915</u>

\a Operational cost is estimated at 7-8% for engaging implementing partners for social mobilization, value chain related business mobilisation and training/start up capital

Islamic Republic of Pakistan

Sindh Coastal Resilience Project

Table 3.11. Project Management & Implementation Support - Financing Gap

Detailed Costs

Detailed Costs	Unit	Quantities							Unit Cost (US\$)	Totals Including Contingencies (US\$)								
		2025	2026	2027	2028	2029	2030	2031		Total	2025	2026	2027	2028	2029	2030	2031	Total
II. Recurrent Costs																		
A. Project Management Unit																		
1. Salaries and Allowances																		
a. Professional Staff																		
Value Chain Specialist	Month	-	-	-	6	6	6	6	24	1,071	-	-	-	7,927	8,279	8,649	9,181	34,036
Gender and Nutrition Specialist	Month	-	-	-	6	6	6	6	24	1,071	-	-	-	7,927	8,279	8,649	9,181	34,036
Climate Change and Adaption Specialist	Month	-	-	-	6	6	6	6	24	1,071	-	-	-	7,927	8,279	8,649	9,181	34,036
M&E Specialist	Month	-	-	-	6	6	6	6	24	1,071	-	-	-	7,927	8,279	8,649	9,181	34,036
Communication/Knowledge Management Specialist	Month	-	-	-	6	6	6	6	24	1,071	-	-	-	7,927	8,279	8,649	9,181	34,036
Micor Finance Specialist	Month	-	-	-	6	6	6	6	24	1,071	-	-	-	7,927	8,279	8,649	9,181	34,036
Manager Internal Audit	Month	-	-	-	6	6	6	6	24	535	-	-	-	3,960	4,136	4,320	4,586	17,002
Admin & Finance Assistant	Month	-	-	-	6	6	6	6	24	535	-	-	-	3,960	4,136	4,320	4,586	17,002
Offices Assistant	Month	-	-	-	6	6	6	6	24	714	-	-	-	5,285	5,519	5,766	6,120	22,690
Project Allowance - Division Accounts Officer	Staff	-	-	-	6	6	6	6	24	178	-	-	-	1,318	1,376	1,437	1,526	5,657
Subtotal														62,086	64,841	67,736	71,902	266,564
2. Implementation Partners /a	%	1	1	1	1	1	1	1	7	232,785	-	-	-	438,295	344,531	339,063	338,175	1,460,064
Subtotal														500,381	409,372	406,799	410,077	1,726,628
B. District Coordination Unit - Thatta																		
1. Salaries and Allowances																		
a. Professional Staff																		
Value Chain Officer	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Admin & Finance Assistant	Month	-	-	-	6	6	6	6	24	360	-	-	-	2,012	1,979	1,948	1,948	7,887
Business Support Facilitator	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Subtotal														8,047	7,917	7,792	7,792	31,548
2. Operating Cost - DCU Thatta																		
Office Rent	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Postage/ Courier	Month	-	-	-	6	6	6	6	24	40	-	-	-	224	220	216	216	876
Telephone/ Internet charges/ fax etc	Month	-	-	-	6	6	6	6	24	60	-	-	-	335	330	325	325	1,314
O&M,POL Cost for (Vehicles)	No	-	-	-	12	12	12	12	48	893	-	-	-	9,981	9,820	9,664	9,664	39,128
O&M,POL Cost for Motorcycles	No	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
O&M,POL Cost for Generator	No	-	-	-	6	6	6	6	24	715	-	-	-	3,996	3,931	3,869	3,869	15,664
Meetings and Conference	Ls	-	-	-	6	6	6	6	24	130	-	-	-	726	715	703	703	2,848
Stationery	Ls	-	-	-	6	6	6	6	24	360	-	-	-	2,012	1,979	1,948	1,948	7,887
Travel and Daily Allowance	Ls	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Utility Charges	Ls	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Subtotal														29,344	28,871	28,412	28,412	115,039
Subtotal														-	-	-	37,391	36,788

C. District Coordination Unit - Badin																		
1. Salaries and Allowances																		
a. Professional Staff																		
Value Chain Officer	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Admin & Finance Assistant	Month	-	-	-	6	6	6	6	24	360	-	-	-	2,012	1,979	1,948	1,948	7,887
Business Support Facilitator	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Subtotal											-	-	-	8,047	7,917	7,792	7,792	31,548
2. Operating Cost - DCU Badin																		
Office Rent	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Postage/ Courier	Month	-	-	-	6	6	6	6	24	40	-	-	-	224	220	216	216	876
Telephone/ Internet charges/ fax etc	Month	-	-	-	6	6	6	6	24	60	-	-	-	335	330	325	325	1,314
O&M,POL Cost for (Vehicles)	No	-	-	-	12	12	12	12	48	893	-	-	-	9,981	9,820	9,664	9,664	39,128
O&M,POL Cost for Motorcycles	No	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
O&M,POL Cost for Generator	No	-	-	-	6	6	6	6	24	715	-	-	-	3,996	3,931	3,869	3,869	15,664
Meetings and Conference	Ls	-	-	-	6	6	6	6	24	130	-	-	-	726	715	703	703	2,848
Stationery	Ls	-	-	-	6	6	6	6	24	360	-	-	-	2,012	1,979	1,948	1,948	7,887
Travel and Daily Allowance	Ls	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Utility Charges	Ls	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Subtotal											-	-	-	29,344	28,871	28,412	28,412	115,039
Subtotal											-	-	-	37,391	36,788	36,204	36,204	146,587
D. District Coordination Unit - Sajawal																		
1. Salaries and Allowances																		
a. Professional Staff																		
Value Chain Officer	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Admin & Finance Assistant	Month	-	-	-	6	6	6	6	24	360	-	-	-	2,012	1,979	1,948	1,948	7,887
Business Support Facilitator	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Subtotal											-	-	-	8,047	7,917	7,792	7,792	31,548
2. Operating Cost - DCU Sajawal																		
Office Rent	Month	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Postage/ Courier	Month	-	-	-	6	6	6	6	24	40	-	-	-	224	220	216	216	876
Telephone/ Internet charges/ fax etc	Month	-	-	-	6	6	6	6	24	60	-	-	-	335	330	325	325	1,314
O&M,POL Cost for (Vehicles)	No	-	-	-	12	12	12	12	48	893	-	-	-	9,981	9,820	9,664	9,664	39,128
O&M,POL Cost for Motorcycles	No	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
O&M,POL Cost for Generator	No	-	-	-	6	6	6	6	24	715	-	-	-	3,996	3,931	3,869	3,869	15,664
Meetings and Conference	Ls	-	-	-	6	6	6	6	24	130	-	-	-	726	715	703	703	2,848
Stationery	Ls	-	-	-	6	6	6	6	24	360	-	-	-	2,012	1,979	1,948	1,948	7,887
Travel and Daily Allowance	Ls	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Utility Charges	Ls	-	-	-	6	6	6	6	24	540	-	-	-	3,018	2,969	2,922	2,922	11,830
Subtotal											-	-	-	29,344	28,871	28,412	28,412	115,039
Total											-	-	-	612,554	519,736	515,411	518,689	2,166,390

^a Operational cost is estimated at 7-8% for engaging implementing partners for social mobilization, value chain related business mobilisation and training/start up capital

C. Expenditure and Disbursement Accounts

Islamic Republic of Pakistan
Sindh Coastal Resilience Project

Expenditure Accounts by Years -- Totals Including Contingencies

	Totals Including Contingencies (US\$ '000)							Total
	2025	2026	2027	2028	2029	2030	2031	
I. Investment Costs								
A. Civil Works/ Community Infrastructures	999	3,317	3,787	8,341	7,775	5,767	4,491	34,477
B. Vehicles	357	-	-	-	-	-	-	357
C. Credit	3,496	1,581	3,580	4,900	4,429	4,112	-	22,098
D. Computer and Equipment	112	-	-	-	-	-	-	112
E. Technical Assistance, Trainings and Studies	2,354	2,781	2,949	5,019	4,236	3,505	965	21,808
F. Grants and Subsidies	1,956	2,653	3,553	3,918	3,988	3,539	2,905	22,511
G. Private Sector	4,984	5,207	5,688	13,125	9,499	14,630	-	53,132
Total Investment Costs	14,258	15,540	19,556	35,303	29,926	31,553	8,361	154,497
II. Recurrent Costs								
A. Salaries and Allowances	314	322	328	329	337	345	360	2,335
B. Operating Costs	607	804	1,077	1,196	1,011	1,004	1,013	6,712
Total Recurrent Costs	921	1,125	1,405	1,525	1,349	1,350	1,373	9,047
Total PROJECT COSTS	15,179	16,665	20,961	36,828	31,275	32,903	9,734	163,544

D. Disbursement account by financiers

Islamic Republic of Pakistan
Sindh Coastal Resilience Project

Disbursement Accounts by Financiers

	(US\$ '000)						Total
	IFAD Loan	GoS	4P		Commercial Banking	Total	
			Financing Gap	Private Scetor			
Amount	Amount	Amount	Amount	Amount	Amount	Amount	
1. Civil Works/ Community Infrastructures	13,069	1,449	17,204	-	2,756	-	34,477
2. Vehicles	304	54	-	-	-	-	357
3. Computer and Equipment	95	17	-	-	-	-	112
4. Credit	15,378	-	6,721	-	-	-	22,098
5. Technical Assistance, Trainings, Workshops and Studies	12,141	798	6,370	-	-	-	19,310
6. Grants and Subsidies	13,497	1,496	7,889	925	-	-	23,808
7. Private Sector	-	-	-	-	-	53,132	53,132
8. Salaries and Allowances	1,086	1,051	199	-	-	-	2,335
9. Operating Costs	4,431	1,867	1,617	-	-	-	7,915
Total PROJECT COSTS	60,000	6,731	40,000	925	2,756	53,132	163,544

E. Expenditure Accounts – by years

Islamic Republic of Pakistan
Sindh Coastal Resilience Project

Expenditure Accounts by Years -- Totals Including Contingencies

	Totals Including Contingencies (US\$ '000)							Total
	2025	2026	2027	2028	2029	2030	2031	
I. Investment Costs								
A. Civil Works/ Community Infrastructures	999	3,317	3,787	8,341	7,775	5,767	4,491	34,477
B. Vehicles	357	-	-	-	-	-	-	357
C. Credit	3,496	1,581	3,580	4,900	4,429	4,112	-	22,098
D. Computer and Equipment	112	-	-	-	-	-	-	112
E. Technical Assistance, Trainings and Studies	2,354	2,781	2,949	5,019	4,236	3,505	965	21,808
F. Grants and Subsidies	1,956	2,653	3,553	3,918	3,988	3,539	2,905	22,511
G. Private Sector	4,984	5,207	5,688	13,125	9,499	14,630	-	53,132
Total Investment Costs	14,258	15,540	19,556	35,303	29,926	31,553	8,361	154,497
II. Recurrent Costs								
A. Salaries and Allowances	314	322	328	329	337	345	360	2,335
B. Operating Costs	607	804	1,077	1,196	1,011	1,004	1,013	6,712
Total Recurrent Costs	921	1,125	1,405	1,525	1,349	1,350	1,373	9,047
Total PROJECT COSTS	15,179	16,665	20,961	36,828	31,275	32,903	9,734	163,544

F. Expenditure Accounts by Components

Islamic Republic of Pakistan
Sindh Coastal Resilience Project

Expenditure Accounts by Components - Totals Including Contingencies
(US\$ '000)

	Transformation of Income Opportunities					Economic and Social Inclusion			Project Management & Implementation Support		Total
	Organization, Planning & Training	Community and Value Chain Support Infrastructure		Institutional Support	Challenge fund and policy support	Economic Graduation of Landless Poor	Job Market Integration of Youth	Intiutional Support to STEVTA	Project Management	Implementing Partners	
		Financial Inclusion									
I. Investment Costs											
A. Civil Works/ Community Infrastructures	-	34,477	-	-	-	-	-	-	-	-	34,477
B. Vehicles	-	-	-	-	-	-	-	-	357	-	357
C. Credit	-	-	22,098	-	-	-	-	-	-	-	22,098
D. Computer and Equipment	-	-	-	-	-	-	-	-	112	-	112
E. Technical Assistance, Trainings and Studies	70	-	31	1,589	3,469	20	14,843	1,684	103	-	21,808
F. Grants and Subsidies	4,383	-	-	408	-	17,721	-	-	-	-	22,511
G. Private Sector	-	-	53,132	-	-	-	-	-	-	-	53,132
Total Investment Costs	4,452	34,477	75,262	1,997	3,469	17,741	14,843	1,684	572	-	154,497
II. Recurrent Costs											
A. Salaries and Allowances	-	-	-	-	-	-	-	-	2,335	-	2,335
B. Operating Costs	-	-	-	-	-	-	-	-	2,264	4,448	6,712
Total Recurrent Costs	-	-	-	-	-	-	-	-	4,599	4,448	9,047
Total PROJECT COSTS	4,452	34,477	75,262	1,997	3,469	17,741	14,843	1,684	5,172	4,448	163,544
Taxes	113	1,449	-	300	-	1,393	-	-	564	667	4,486
Foreign Exchange	-	76	-	-	-	-	-	-	-	-	76

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 4: Economic and Financial Analysis

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

I. INTRODUCTION

1. This annex (financial and economic analysis) evaluates the investments under the Sindh Coastal Resilience Project to be co-financed by the Government of the Sindh and the International Fund for Agriculture Development (IFAD) alongside contributions made by private sector and the beneficiaries. The annex was prepared at the project formulation stage. The project targets three districts i.e. Thatta, Badin and Sujawal of the Sindh province of Pakistan with the Development Objective (PDO)¹ to ***promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups***. This will be achieved through three outcomes: (i) improved production under climate smart agriculture and fisheries integrated with 4P based value chains models that facilitate integration to markets; (ii) increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) improved access to natural resources (land and water) and enabling policy environment. Project approach suggests a participatory, community-led and demand driven implementation of activities.

2. The project will benefit around 260,000 HHs in a phased manner through interventions spanning over the seven years of project implementation period (2025-2031). The project consists of diverse yet mutually reinforcing soft and tangible interventions that are specifically designed keeping in view the needs of rural poor, women and youth. While poverty is a multidimensional phenomenon, therefore the theory of change for the project encompasses range of responsive interventions. These include three sets of interventions; firstly, organizing the target communities to have access to improved production inputs, credit, competitive markets and private sector investments; secondly, investment in socio-economic infrastructure to improve target populations' access to economic opportunities, markets and better living conditions, and; thirdly, investment in ultra-poor landless households' productive capacities (provision of assets and skills) to enable them to find remunerative job opportunities or develop self-enterprises for improved incomes. Concerns related to gender, youth, nutrition and climate resilience are addressed both during organizational processes as well as in the design and delivery of interventions. The project interventions are based on IFAD's experience in the country, aligned with Pakistan COSOP, IFAD's strategic framework and the IFAD12 corporate priorities.

3. The financial and economic analysis looked at the benefits of the project that will accrue to rural households and assesses feasibility of the different investments in line with the extent of the beneficiary participation in the project activities. Field work undertaken during the project formulation focused on determining the cost and benefits of various economic activity related to the scope of the project, prices and the anticipated transformation in the production system including expansion in income or disposable income expected as a result of farmer and fisherfolk organization and aggregation of productive capacities and produce, linkages to extension service and private sector, provision of remunerative skills and productive assets and up-gradation of community physical infrastructure, roads and value chain infrastructure.

4. The Project target groups represent the heterogeneity of the demography of the three districts. While majority of the households are landless, livelihoods is dependent on sharecropping, small-scale

¹ Of IFAD parallel financed component in SCRP.

fishing, daily wage works and micro level limited scale businesses. There are 115,650 farms in the three target districts, out of which 96,600 farms can be categorised as small farms.² In addition 84, percent of households are landless and earn their living as tenants, sharecroppers and daily wage earners. There are 10,945 fishermen households and 90 percent work as hired-hands on boats owned by others. The eligibility for targeting is determined by the poverty ranking, farm size in the case of agriculture, boat ownership or size of boat in the case of fishing and similarly infrastructure needs pertinent to poverty pockets. As a guiding principle, (i) young men and women from poor households with a poverty score of 0-42 will be afforded opportunities for acquisition of productive assets and skills, the latter further supported through provision of a start up capital or support for labour market integration; (ii) smallholders organised into interest groups further aggregated into producers' organisations; and, (iii) value chain and off-farm enterprise promotion through financial inclusion. Gender will be mainstreamed in all facets of planning, implementation and evaluation. Of the direct beneficiaries, 40 percent will be women and 30 percent youth (50:50 male and female). Thus ensuring that interventions are done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.

5. For assessing the cashflow of the target beneficiaries, crop, enterprise and individual budgets/models have been prepared in the context of the Sindh representing 2024 as a reference year and projected for the project years. The models are made reflecting changes in practices directly attributed to project support.

II. Summary of Benefits

6. The project proposes an inclusive approach to transformation of rural incomes in the target rural communities. The project consists of three complementary components that address the causes of poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. The project assistance, will benefits participating persons and households in a number of ways including: (i) increased annual income resulting from productive assets and, agriculture, livestock and fishing activities; (ii) income derived from employment and self-employment resulting from vocational/entrepreneurship training; (iii) decreased healthcare expenditure as a result of having access to clean drinking water and improved sanitation; (iv) decreased cost of travel/transportation resulting from better access roads; and, (v) increased efficiency resulting from improved irrigation infrastructure..

7. The project interventions are aligned to the different facets of livelihoods enhancement. The interventions will primarily build capacities and resilience of the participating households directly through increased household income either through increased outputs or through the reduction of household expenditures which can otherwise be used for productivity and consumption purposes. The transfer of productive asset (livestock and skills – vocation/entrepreneurial training) directly results in increased income while the physical infrastructure schemes typically result into reduced cost of economic activities as well as on account of transportation. Intervention in agriculture and fisheries value chains will have impact in terms of increased income mainly through quantitative and qualitative improvements.

² Pakistan Bureau of Statistics. 2016

8. Main benefits accruing from the project include: (i) organization, training, adoption of climate smart agriculture practices, technology infusion, access to affordable financial services and linkages with private sector under 4Ps, result in increased productivity and production leading to increased incomes; (ii) improved community socio-economic infrastructure including access roads, drinking water, irrigation, drainage, sanitation and solar energy resulting in better and cost effective access to markets, women reduction of drudgery in water collection, improvement sanitary environment and reduced disease burden, more secure access to water, improved drainage making more land available for cultivation and solar energy creating opportunities for productive activities. (iii) productive asset provision to ultra-poor households creating sustainable source of income with spillover impact on improved nutrition and social and economic empowerment; (iii) employment and enterprise development opportunities for the male and female youth resulting in sustainable incomes, financial and social inclusion and empowerment. Other benefits include better climate resilience, improved nutrition, women and gender empowerment and financial inclusion of the currently un-bankable rural poor.

9. The social and environmental benefits expected from the project are: (i) enhanced opportunities for women/youth to engage in profitable agricultural, livestock and fishing activities. This will result from gender sensitive development approaches introduced by the project to vocational, small enterprises and tailored interventions to the specific needs of women and to ensure more equity in the roles and responsibilities of both men and women; (ii) reduced environmental degradation and conservation of natural resource base thus providing sustainable livelihoods of present and future generations; and (iii) introduction of environmentally friendly and saline agricultural practices.

10. **Project Beneficiaries.** An estimated 260,000 households (1.3 million persons), almost 33 percent of the total rural households in the three districts, directly while others will also indirectly benefit from the project. Indirect beneficiaries are estimated to be around 100,000 household but such benefits have not been including in the EFA.

11. **The Benefits.** The benefits that would accrue to various project beneficiaries would be either incremental or additional. In the case of development activities, benefits will accrue to existing farmers through increased productivity, better quality produce, reduced losses and better produce prices. These would be the results of technical assistance and capacity building of the local communities. Economic activities would assist farmers through skills enhancement in technical and managerial aspects, technological improvements, linkages development with supply chains including forward contracting, improving consolidation infrastructure and improved pre-harvest and post-harvest management. The project will also encourage economies of scale through group procurement and joint marketing. In addition, the Project would support the up-grading of rural roads to reduce the transportation costs and hence enhance competitiveness of farmers and establish market linkages. In the case of improved access to market (through better rural roads) benefits would be in the form of lower marketing cost, reduced losses and increased volumes marketed. The irrigation infrastructure, including drainage improvements, would enable farmers to produce additional crops increasing production intensity thus strengthening commercialization of value chains. Value chain development activities in the new areas brought under cultivation and improved roads would be implemented complementarily. The project benefits are demonstrated through the following models;

12. **Agriculture, and Livestock.** Several crop, livestock and fisheries related models have been developed based on the current production systems prevailing the proposed project areas. Similar models

have also been developed under the asset provision component where a household will receive a livestock. Farming practices are traditional and a low input, low output model as well as limited to a few crops mainly due to limited availability of water and soil/water salinity. Livestock is also practiced on a small scale with a subsistence orientation. The models demonstrate the result of project interventions in terms of increased efficiency. With climate resilient practices, efficient water use and water conservation practices, additional cropping would be realised by beneficiaries. The same would apply to livestock where improved practices would help improve livestock husbandry and management resulting in improved productivity. Resulting from the intervention in increased climate resilience of the farming in the project areas, about 37% increase in income levels is expected.

13. **Fisheries.** From the perspective of fisheries sector the primary focus is on the fisher folks (operating through small boats of <25 feet) which usually go for a day trip of fishing. The incremental benefits accruing as a result of the project include decreased losses due to improved infrastructure and improved handling practices, increased prices (premium) owing to better quality, access to sea for extended distance, functioning jetties and improved access to market.

14. The small boat on average have a small catch usually 5-10 kg of lobster and 10 kg of shrimp in one season and 80-100 kg of crabs in another season on a daily basis. The intermediary who is usually also the fisherfolks' creditor retains 40 - 50% of the catch. The remaining 50-60% of the catch is equally distributed between the captain and fisherfolks on the boat. It is estimated that on average the small boat fisherfolks lose 50% of their catch due to poor handling and storage inside the boat and owing to transportation of the catch through unsuitable means to the factory gate. The catch which is not acceptable to the factories is sold as fishmeal. For the fisherfolks (small) it is important that the current level of losses are reduced, a better bargaining position is facilitated and shift of focus is facilitated from volume of catch to managing quality of the fish catch to increase the income levels. The resultant increased income from project interventions is estimated to be up to 30-35% for the small fisher folks.

15. **Financial inclusion.** Lack of opportunities and access to finance besides financial illiteracy are the main causes of financial exclusion. The project assistance will leverage financial inclusion through formal banking sector using the instrument of financial subsidy/matching grants and backed by financial literacy training for the beneficiaries. This will contribute to economic growth in the rural economy by stimulating entrepreneurship and expanding investment opportunities.

16. **Asset Transfer.** Diverse packages will be provided under the project including farm, non-farm and off-farm related assets as determined in the household investment plans. The actual packages may vary, however for the analysis, the financial models for few indicated types of assets have been worked out as with and without project scenarios. The accruing benefits is the income generated from the productive use of the asset and, at the same time, will be enriching the asset base of the households. The costs and benefits have been worked out through partial activity budgets. It is estimated that the income of the recipient household will enhance by 124% because of receiving the productive asset and income generated from it.

17. **Youth Employment.** The project intends to provide soft skills as an asset to youth to enter the job market or pursue self-employment. The financial model for this is worked out on the premise of engagement in non-farm business activity as wage/salary earner or self-employment undertaken. It is estimated that with new skills acquired, the income will enhance by more than 50% from the current level by engaging in more remunerative jobs or earning higher level of wages – skilled as opposed to semi-skilled persons.

18. **Physical Infrastructure (CPI and Roads).** The project has planned investment in drinking water supply, improved sanitation, road access, on farm irrigation efficiency, improved on-farm drainage and off-shore aquaculture development. The benefits include reduced costs, expenditure, time and produce saving have been considering resulting from improved infrastructure condition in the project area. The benefit of the infrastructure are however embedded into the economic activities and shall provide the necessary impetus to communities and individual to participate in project intervention and gain meaningful benefits. The women empowerment benefits are given in the following table.

Non-agricultural benefits of women empowerment and economic development

S. No.	Women Labour Wage Rates	Unit	Time Saving
1	Daily hours saved (hours)	Hour	4.00
2	Average hourly wage rate for women (PRs)	Rs	37.50
3	SWR for female labor	Rs/day	300.00
4	Wage Rate for four hours	Hr	150
5	SCF		0.70
6	Hour Saved	Hr	4.00
7	Days	Days	20
8	Household women	No	1,000
9	Financial	Rs	12.00
10	Economic	Rs	8.40

19. **Health Benefits.** Improved water supply, together with WASH trainings, in target communities is estimated to halve the average cost per household associated with water borne diseases and can prevent loss of 10 days of remuneration of semi-skilled worker. Total benefits are estimated in term of transport, doctor fees, and medicine and laboratory tests. Due to availability of clean drinking water, several chronic diseases will decrease, thereby improving the overall health and hygiene condition in the communities

20. **Social and Environmental Benefits:** The main *social and environmental benefits* expected from the Project are: (i) enhanced opportunities for women and youth to engage in profitable agricultural and livestock (dairy product) activities. This will result from gender sensitive development approaches introduced by the project to tailor interventions to the specific needs of women and to ensure more equity in the roles and responsibilities of both men and women; (ii) reduced environmental degradation and conserved natural resource base in the protected rangelands for sustainable livelihoods of present and future generations; and (iii) environmentally friendly agronomic practices. The social and environmental benefits are not accounted for in the EFA.

III. FINANCIAL ANALYSIS

A. Method and Approach

21. The benefits likely to accrue from the implementation of the projects are both tangible as well as intangible. The tangible benefits are those, which can be directly expressed in monetary terms. These are represented by incremental crop production or new additional income made possible by the implementation of the proposed project. Based on the component wise agronomic data related to present and future cropping intensity, crop yields and associated crop inputs, crop budgets under “with” and

“without scheme” scenarios of economic and financial; prices have been prepared. Total GVP, cost of production, NVP and incremental benefits have been computed by multiplying respective acreage under “without” and “with project.

22. **Activity Models of the Project:** In all 260,000 Beneficiaries benefited from the project interventions. These beneficiaries were grouped in the following sub project models: (i) crop models (ii) Fishery and Livestock and (iii) social and community Enterprises. The project interventions included several social development activities, which had significant impacts on the financial benefits of the farm households through adoption of timely and cost-effective operations besides competitive marketing arrangements.

23. Under the existing farming systems, innovations have been piloted and are ready to be scaled up such as vertical farming, improved seeds and better practice as well as improved dehydration techniques. While the initial experience shows significant increase in income (for instance more than 78% in the case of vertical farming), taking these to scale may have lower returns. The realistic increase in yield is estimated to be between 25 – 45%.

24. The development of new lands is a slow process given the tough terrain and the need for investment in secondary and tertiary Irrigation improvements community infrastructure as well as development of land. The yield potential has been adjusted keeping this in view using two potential crops (assuming one fodder and vegetables) on the newly developed lands.

25. Under the cooperative model, the project experience shows that in Thatta, Bedin and Sujawal generally farmers operate under a multi-value chain/integrated farming model. Typically, each household derive income from rice and other crops which may include vegetables, and grain and/or fodder crops. This model is worked out on average farm size. The income from the same land areas is estimated to be almost doubled with project interventions with regards to improving farming practices, growing techniques/technology, introducing value addition (dehydration and processing), and access to affordable formal sources of finance for inputs etc.

26. **Key Parameters:** In order to undertake financial analysis of the economic activities, the following parameters have been used:

- **Incremental benefits:** The financial analysis is carried out taking into account the incremental benefit resulting from the project investment as a result of the project components. The financial returns have been evaluated for consideration (i) irrigation and land development – increased produce at market rates; (ii) increased yield, premium price and reduced losses/better recovery rates as a result of the economic development activities; (iii) benefit accruing to farmers being part of the partnership models through forward contracting, aggregation platforms, 4Ps; and, (iv) the incremental benefits resulting from better road connectivity in the form of lower cost of transportation and time saving.
- **Phasing of Benefits:** The financial analysis carried out assumed incremental benefits over the life of the project (7 years) and for seven subsequent years after the project completion.

27. The financial analysis takes into account the total cost of the project including price and physical contingencies. For the purpose of the economic analysis the project cost includes economic investment, recurrent and post-project operation and maintenance costs (allowance) covering a period of 20 years.

B. Key Assumptions

28. Following are the key assumptions used in the financial analysis;

- **Financial Prices:** The financial prices of inputs and products have been updated from local markets, during field visits and consultations with stakeholders including government departments. Data on wage rates were obtained from farmers, enterprises and government line departments. In addition, inputs required in farming such as seed, fruit plants, fertilizers, pesticides/chemicals, transportation and farm gate prices of outputs were obtained from farmers. Average prices of 2023 have been used in the financial analysis.
- **Wage Rates:** Labor requirement have been met from the family labor which is valued at prevailing wage rates in the area. Instead of wage earning as part of farming, the household benefits are worked out in the form of net benefits from the farming activities rather than wages. The applicable average wage rate was noted to be Rs. 800 /day which has been used in the analysis.
- **Opportunity Cost of Capital:** The opportunity cost of capital of 22% is used in the financial analysis.
- **Benefits of rural roads:** The analysis considers benefits to the end users rather than transporters in this analysis. Both inward and outward good transportation are taken into consideration and at the same level. In addition to cost and time saving, farmers will be able to save produce currently lost and will be able to market it.

C. Analysis

29. **Household level benefits and aggregation:** The cropping pattern for each household was worked out under with project and without project scenario and then aggregated at the project level accounting for the number of households to be benefited from the project interventions.

30. **Financial returns:** Based on the crop-budgets, financial returns were worked as it accrues at household level for an integrated farming system.

31. The financial analysis using benefit to the farm households and other development activities actors exhibits feasibility of the proposed project, its scope and targets. Through the project, incremental increase in the income of rural households is expected to be significant. In addition to increased income, there will be increased labor opportunities through the project supported activities. The increased labor work can easily be accommodated given the current level of engagement of family labor. The financial return per household as a result of the project are estimated to be USD385/household on an average basis as against an investment of same level. From the point of view of the financial benefits to beneficiary households, the project interventions are attractive.

32. The financial analysis of project shows viability of the proposed project as evident from its overall Financial Internal Rate of Return (FIRR) of 27.97%. The Net Present Value (NPV) of the proposed project over 20 years' period has been noted to be USD 73.05 million.

IV. ECONOMIC ANALYSIS

A. Method and Approach

33. In Pakistan, the marginal productivity of capital is believed to lie somewhere between 10 and 12 percent. The Appraisal Wing of the Planning Commission, Government of Pakistan presently uses the

opportunity cost of capital as 12.50%, and project life assuming that benefit will span over 20 years including 7 years of project implementation period. However, the current discount rate is 22%.

B. Economic Cost

34. The economic analyses consider the total economic investment, economic incremental recurrent and economic operation and maintenance cost of the project. The analysis is carried out taking the economic prices of 2023 in constant terms. Price contingencies are excluded from the analysis while physical contingencies are included in the analysis. For the capital items, no residual values have been considered.

C. Key Assumptions

- A twenty-year analysis period has been assumed, which included a 7-year project investment period.
- All inputs and outputs that are traded are valued at prices as of December 2023.
- Economic investment costs are net of taxes and price contingencies, credit for recurring expenditures, etc. All costs directly associated with the incremental production are included in full, including incremental farm inputs and family labour.
- A standard conversion factor (SCF) ranging between 0.875 and 0.88 is applied to items for adjusting financial prices.
- The average financial rural wage rate is taken to be the best estimate of the economic value of Labour in rural Thatta, Hyderabad and Karachi. The financial price of Labour reflects seasonal variation in employment opportunities in the project area.
- The analysis includes only on-farm and off-farm benefits and includes contributable benefits, from different project interrelations and social enterprises.
- Some notional benefits emerging from other social interventions such as drudgery reduction, which are few have not been monetized or accounted for in the ex-post EFA;
- The analysis employs an Opportunity Cost of Capital (OCC) at 22%, which is the July 2023 long-term bond rate in Pakistan.
- Price escalation Domestic = 6%
- Inflation factor = 1.04%

D. Cost Benefits Streams and Analysis

35. The project economic costs were direct expenditures after adjusting for inflation. Recurrent costs for continued operations have been included in full. Economic costs for inputs and output models were estimated by applying the conversion factors on the financial prices. Commodity prices were collected.

36. **Production benefits.** The farm productions are direct output from the respective farming practices resulted in productivity increases ranging between 5 and 10 percent.

37. **Project performance indicators.** Cost-benefit analysis yielded an overall IRR of 22.65% of the project with an NPV at a USD 49.54 and a BCR of 1.02. A positive NPV under the opportunity Cost of Capital of 16%³ indicated that the project investments have been robust and sound. The project is also viable considering the current discount rate of 22%.

³ A discount rate based on Pakistan's long-term bond rate and also State Bank lending rate 2023-24

E. Sensitivity Analysis

38. Three major risks were identified – (i) security; (ii) financial management capacity, and (iii) climate-risks – as potentially leading to underperformance for the achievement of full-scale project benefits, delay in realization of benefits and reduced effectiveness. Under various risk scenarios, the analysis reveals acceptable values of both NPV and EIRR, and thus the proposed investment is feasible under these adverse scenarios.

39. The sensitivity analysis was undertaken assuming different scenarios and its likely impact on the overall effect on economic viability of the proposed project. The result of the analysis indicates that a delayed project implementation by one years reduces the EIRR significantly (from 22.65% to 13.65%). The reduction of incremental benefits by 20% doesn't reduce the EIRR significantly while the increase in cost by 20% reduce the EIRR to 13.65%. The sensitivity analysis shows that the project investment challenges the viability gauged against the discount rate used under the assumed scenarios. The delay of benefits by 1 year gives a higher EIRR than the discount rate and it is therefore important that a robust project management and implementation support is in place to avoid cost overrun which is mainly caused by delayed implementation. Sensitivity analysis (SA) of the project investments is given in the following table.

Table 1: Sensitivity analysis of SCRP interventions

SENSITIVITY ANALYSIS (SA)				
Scenarios	Δ%	Link with the risk matrix	IRR (%)	NPV (USD M)
Normal Scenario	Normal	No Adverse Risks	22.65%	49.54
Project benefits	-10%	Poor Security Situation affecting project benefits adversely	19.00%	32.3
Project benefits	-20%		15.49%	15.0
Project costs	10%		Weak financial capacity result in cost overrun and delayed implementation	19.33%
Project costs	20%	16.65%		25.0
Time lag in benefits (Year)	1	17.03%		27.5
Time lag in benefits (Year)	2	13.65%		7.9
Success Rates	-10%	Climate risk affecting success rate of the activities	17.32%	27.5
Success Rates	-20%		13.01%	7.9

V. CONCLUSION AND RECOMMENDATIONS

40. Overall, the project investment represents an economically viable proposition which is feasible under different likely scenarios and offer the necessary incentives for participation of beneficiaries in the interventions proposed except a delay of two years in benefits. The following recommendations are made to ensure that project benefits are ensured and sustained.

- Policy reforms shall be completed around mid-term of the project implementation so that the benefits accrue to beneficiaries and so that incremental incomes are sustained.
- The physical infrastructure should be taken over by different government institutions or community/producers' organizations as per their mandate and included in their inventory of assets so that O&M budgets are allocated.
- There has been no recent demand assessment for workforce in the districts and in the province. For this reason a market study/outlook shall be included in the project which should be

undertaken during the first year of implementation duly informing the skills development and start-up capital related activities.

- The analysis shows that the project is sensitive to simultaneous increase in costs and decline in benefits and a delay of two years in project benefits, the project, therefore, has to ensure that cost efficiency is achieved through innovative approaches such as community led procurement, use of digital channels and other cost saving methodologies as well as effective project management complemented by robust implementation support.
- To sustain benefits, the scope of work of the project implementation partners shall include specific scope pertaining to identification of activities following a rigorous risk assessment as well as post-activity engagement/support to beneficiaries for ensuring accrual of benefits.

Table 2: Financial Analysis of SCRP Project – All Components (USD Million)

Detail	Project Years	TOTAL NET INCREMENTAL BENEFITS			NET INCREMENTAL COSTS			Cash Flow (million USD)
		Livelihoods Improvement	Agriculture and Livestock Development	Total Incremental Benefits	Financial Investment Costs (million USD)	Financial recurrent Costs (million USD)	Total Incremental Costs	
FINANCIAL ANALYSIS	PY1	0.0	0.4	0.4	10.259	0.000	10.259	(9.9)
	PY2	12.5	0.8	13.3	21.938	0.000	21.938	(8.6)
	PY3	19.8	2.1	21.9	40.974	0.000	40.974	(19.1)
	PY4	18.5	2.6	21.0	6.050	0.000	6.050	15.0
	PY5	25.9	2.7	28.7	55.572	0.000	55.572	(26.9)
	PY6	33.2	3.4	36.6	51.156	0.000	51.156	(14.5)
	PY7	33.3	4.5	37.8	9.689	0.000	9.689	28.1
	PY8	33.3	4.8	38.1	0.0	1.302	1.302	36.8
	PY9	33.4	5.0	38.4	0.0	1.302	1.302	37.1
	PY10	33.4	5.0	38.5	0.0	1.302	1.302	37.1
	PY11	33.5	5.0	38.5	0.0	1.302	1.302	37.2
	PY12	33.6	5.0	38.6	0.0	1.302	1.302	37.3
	PY13	33.7	5.0	38.7	0.0	1.302	1.302	37.4
	PY14	33.8	5.0	38.8	0.0	1.302	1.302	37.5
	PY15	33.9	5.0	38.9	0.0	1.302	1.302	37.6
	PY16	33.9	5.0	38.9	0.0	1.302	1.302	37.6
	PY17	33.9	5.0	38.9	0.0	1.302	1.302	37.6
	PY18	33.9	5.0	38.9	0.0	1.302	1.302	37.6
	PY19	33.9	5.0	38.9	0.0	1.302	1.302	37.6
	PY20	33.9	5.0	38.9	0.0	1.302	1.302	37.6

NPV @22%	73.05
EIRR @12.50%	27.97%

Table 3: Economic Analysis of SCRP Project – All Components

Detail	Project Years	TOTAL NET INCREMENTAL BENEFITS			NET INCREMENTAL COSTS			Cash Flow (million USD)
		Livelihoods Improvement	Agriculture and Livestock Development	Total Incremental Benefits	Economic Investment Costs (million USD)	Economic recurrent Costs (million USD)	Total Incremental Costs	
ECONOMIC ANALYSIS	PY1	0.0	0.3	0.3	10.259	0.0	10.3	(9.9)
	PY2	11.0	0.7	11.7	21.938	0.0	21.9	(10.2)
	PY3	17.4	1.8	19.3	40.974	0.0	41.0	(21.7)
	PY4	16.2	2.3	18.5	6.050	0.0	6.1	12.5
	PY5	22.8	2.4	25.2	55.572	0.0	55.6	(30.4)
	PY6	29.2	3.0	32.2	51.156	0.0	51.2	(18.9)
	PY7	29.3	4.0	33.2	9.689	0.0	9.7	23.5
	PY8	29.3	4.2	33.5	0.00	1.3	1.3	32.2
	PY9	29.4	4.4	33.8	0.00	1.3	1.3	32.5
	PY10	29.4	4.4	33.8	0.00	1.3	1.3	32.5
	PY11	29.5	4.4	33.9	0.00	1.3	1.3	32.6
	PY12	29.6	4.4	34.0	0.00	1.3	1.3	32.7
	PY13	29.7	4.4	34.1	0.00	1.3	1.3	32.8
	PY14	29.8	4.4	34.2	0.00	1.3	1.3	32.9
	PY15	29.9	4.4	34.3	0.00	1.3	1.3	33.0
	PY16	29.9	4.4	34.3	0.00	1.3	1.3	33.0
	PY17	29.9	4.4	34.3	0.00	1.3	1.3	33.0
	PY18	29.9	4.4	34.3	0.00	1.3	1.3	33.0
	PY19	29.9	4.4	34.3	0.00	1.3	1.3	33.0
	PY20	29.9	4.4	34.3	0.00	1.3	1.3	33.0

NPV @22%	49.54
EIRR @12.50%	22.65%

Table 4: Economic Sensitivity Analysis of SCRP Project

Year	Project Costs	Project Benefits	Benefit Under Different Scenarios						
			Normal	a	b	c	d	e	f
1	10.259	0.3	-9.9	-10.0	-10.0	-11.0	-12.0	-10.3	-10.3
2	21.938	11.7	-10.2	-11.4	-12.6	-12.4	-14.6	-21.6	-21.9
3	40.974	19.3	-21.7	-23.6	-25.6	-25.8	-29.9	-29.3	-40.7
4	6.050	18.5	12.5	10.6	8.8	11.9	11.2	13.2	5.7
5	55.572	25.2	-30.4	-32.9	-35.4	-35.9	-41.5	-37.1	-36.3
6	51.156	32.2	-18.9	-22.1	-25.4	-24.0	-29.2	-25.9	-32.6
7	9.689	33.2	23.5	20.2	16.9	22.6	21.6	22.5	15.5
8	1.302	33.5	32.2	28.9	25.5	32.1	31.9	31.9	30.9
9	1.302	33.8	32.5	29.1	25.7	32.3	32.2	32.2	31.9
10	1.302	33.8	32.5	29.2	25.8	32.4	32.3	32.5	32.2
11	1.302	33.9	32.6	29.2	25.8	32.5	32.3	32.5	32.5
12	1.302	34.0	32.7	29.3	25.9	32.5	32.4	32.6	32.5
13	1.302	34.1	32.8	29.4	25.9	32.6	32.5	32.7	32.6
14	1.302	34.2	32.9	29.4	26.0	32.7	32.6	32.8	32.7
15	1.302	34.3	33.0	29.5	26.1	32.8	32.7	32.9	32.8
16	1.302	34.3	33.0	29.5	26.1	32.8	32.7	33.0	32.9
17	1.302	34.3	33.0	29.5	26.1	32.8	32.7	33.0	33.0
18	1.302	34.3	33.0	29.5	26.1	32.8	32.7	33.0	33.0
19	1.302	34.3	33.0	29.5	26.1	32.8	32.7	33.0	33.0
20	1.302	34.3	33.0	29.5	26.1	32.8	32.7	33.0	33.0
		EIRR	22.65%	19.00%	15.49%	19.33%	16.65%	17.03%	13.65%
		NPV - USD Million	49.5	32.3	15.0	37.2	25.0	27.5	7.9

Assumptions

- a. Estimated FIRR under Normal Scenario
- b. Benefits delayed three years
- c. Incremental benefits reduced 20%
- d. Development cost increased 20%
- e. Benefits reduced 20% and development cost increased 20%
- f. Benefits delayed by 1 and 2 years

PER ACRE FARM BUDGET -FINANCIAL (Rs.)													
WITH AND WITH OUT PROJECT													
CROP: TOMATO													
Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Gross Value of Production													
Yield Increase /a		Percent		5%	1%	1%	1%	1%	1%				
Price Increase /b		Percent											
Price of Tomato	23.78	Rs.		24	24	24	24	24	24	24	24	24	
Price of By-product		Rs.		-	-	-	-	-	-	-	-	-	
Crop Yield	6500	Kgs.		6,825	6,893	6,962	7,032	7,102	7,173	7,173	7,173	7,173	
Byproduct Yield		Kgs.		-	-	-	-	-	-	-	-	-	
Revenue Main Crop		Rs.		162,299	163,921	165,561	167,216	168,888	170,577	170,577	170,577	170,577	
Revenue Bye-Product		Rs.		-	-	-	-	-	-	-	-	-	
Self Consumption - Main crop		Kgs.		1365	1379	1392	1406	1420	1435	1435	1435	1435	
Self Consumption - Byproduct		Kgs.		0	0	0	0	0	0	0	0	0	
Total Revenue		Rs.		162,299	163,921	165,561	167,216	168,888	170,577	170,577	170,577	170,577	
Cost of Production													
Ploughing	1200	No.		2	2	2	2	2	2	2	2	2	
Cost of Ploughing		Rs.		2400	2400	2400	2400	2400	2400	2400	2400	2400	
Planking	600	No.		1	1	1	1	1	1	1	1	1	
Cost of Planking		Rs.		600	600	600	600	600	600	600	600	600	
Seed	6000.00	Kgs.		1	1	1	1	1	1	1	1	1	
Cost of Seed		Rs.		7500	7500	7500	7500	7500	7500	7500	7500	7500	
Sowing	800	No.		2	2	2	2	2	2	2	2	2	
Cost of Sowing		Rs.		1600	1600	1600	1600	1600	1600	1600	1600	1600	
Laour		Deys		60									
Wages	500	Rs.		30000									
Sub-total		Total Rs.		30000	12100	12100	12100	12100	12100	12100	12100	12100	
Fertilizers													
UREA	2400	Bag		2	2	2	2	2	2	2	2	2	
Cost of Urea		Rs.		4800	4800	4800	4800	4800	4800	4800	4800	4800	
DAP	10000	Bag		1	1	1	1	1	1	1	1	1	
Cost of DAP		Rs.		10000	10000	10000	10000	10000	10000	10000	10000	10000	
POTASH	2800	Bag		1	1	1	1	1	1	1	1	1	
Cost of Potash		Rs.		2800	2800	2800	2800	2800	2800	2800	2800	2800	
Agro Chemicals	500	No		1	1	1	1	1	1	1	1	1	
Cost of Agrochemicals		Rs.		1000	1000	1000	1000	1000	1000	1000	1000	1000	
Labour (Family)	400	days		37	37	35	35	35	35	35	35	35	
Opportunity Cost of Family Labor		Rs.		14800	14800	14000	14000	14000	14000	14000	14000	14000	
Irrigation	2000	Per irrigation		4	4	4	4	4	4	4	4	4	
Cost of Irrigation		Rs.		8000	8000	8000	8000	8000	8000	8000	8000	8000	
Harvesting Labour	600	days		5	5	5	5	5	5	5	5	5	
Cost of Harvesting		Rs.		3000	3000	3000	3000	3000	3000	3000	3000	3000	
Threshing	50.00	Kg		0	0	0	0	0	0	0	0	0	
Cost of Threshing		Rs.		0	0	0	0	0	0	0	0	0	
Sub-Total		Rs.		44400	44400	43600	43600	43600	43600	43600	43600	43600	
Total Costs of Production		Rs.		56500	56500	55700	55700	55700	55700	55700	55700	55700	
Net Value of Production		Rs.		30000	105799	107421	109861	111516	113188	114877	114877	114877	

a/ households will be able to produce second crop due to availability of irrigation water due to irrigation scheme

PER ACRE FARM BUDGET -FINANCIAL (Rs.)
WITH AND WITH OUT PROJECT
CROP: CHILLI

Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Gross Value of Production													
Yield Increase /a		Percent		5%	1%	1%	1%	1%	1%				
Price Increase /b		Percent											
Price of Chilli	195.8	Rs.		196	196	196	196	196	196	196	196	196	196
Price of By-product		Rs.		-	-	-	-	-	-	-	-	-	-
Crop Yield	1500	Kgs.		1,575	1,591	1,607	1,623	1,639	1,655	1,655	1,655	1,655	1,655
Byproduct Yield		Kgs.		-	-	-	-	-	-	-	-	-	-
Revenue Main Crop		Rs.		308,338	311,421	314,535	317,681	320,857	324,066	324,066	324,066	324,066	324,066
Revenue Bye-Product		Rs.		-	-	-	-	-	-	-	-	-	-
Self Consumption - Main crop		Kgs.		315	318	321	325	328	331	331	331	331	331
Self Consumption - Byproduct		Kgs.		0	0	0	0	0	0	0	0	0	0
Total Revenue		Rs.		308,338	311,421	314,535	317,681	320,857	324,066	324,066	324,066	324,066	324,066
Cost of Production													
Ploughing	1200	No.		2	2	2	2	2	2	2	2	2	2
Cost of Ploughing		Rs.		2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
Planking	600	No.		1	1	1	1	1	1	1	1	1	1
Cost of Planking		Rs.		600	600	600	600	600	600	600	600	600	600
Seed	6000.00	Kgs.		1	1	1	1	1	1	1	1	1	1
Cost of Seed		Rs.		7500	7500	7500	7500	7500	7500	7500	7500	7500	7500
Sowing	800	No.		2	2	2	2	2	2	2	2	2	2
Cost of Sowing		Rs.		1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Laour		Deys	40										
Wages	500	Rs.	20000										
Sub-total		Total Rs.	20000	12100	12100	12100	12100	12100	12100	12100	12100	12100	12100
Fertilizers													
UREA	2400	Bag	1	2	2	2	2	2	2	2	2	2	2
Cost of Urea		Rs.	2400	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800
DAP	10000	Bag	1	1	1	1	1	1	1	1	1	1	1
Cost of DAP		Rs.	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
POTASH	2800	Bag	1	1	1	1	1	1	1	1	1	1	1
Cost of Potash		Rs.	2800	2800	2800	2800	2800	2800	2800	2800	2800	2800	2800
Agro Chemicals	500	No	1	1	1	1	1	1	1	1	1	1	1
Cost of Agrochemicals		Rs.	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Labour (Family)	400	days		37	37	35	35	35	35	35	35	35	35
Opprotunity Cost of Family Labor		Rs.	14800	14800	14000	14000	14000	14000	14000	14000	14000	14000	14000
Irrigation	2000	Per irrigation		2	2	2	2	2	2	2	2	2	2
Cost of Irrigation		Rs.		4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Harvesting Labour	600	days		5	5	5	5	5	5	5	5	5	5
Cost of Harvesting		Rs.		3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Threshing	50.00	Kg		0	0	0	0	0	0	0	0	0	0
Cost of Threshing		Rs.		0	0	0	0	0	0	0	0	0	0
Sub-Total		Rs.	12400	40400	40400	39600	39600	39600	39600	39600	39600	39600	39600
Total Costs of Production		Rs.	32400	52500	52500	51700	51700	51700	51700	51700	51700	51700	51700
Net Value of Production		Rs.	20000	255838	258921	262835	265981	269157	272366	272366	272366	272366	272366

a/ households will be able to produce second crop due to availability of irrigation water due to irrigation scheme

PER ACRE FARM BUDGET -FINANCIAL (Rs.)													
WITH AND WITH OUT PROJECT													
CROP: WHEAT													
Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Gross Value of Production													
Increase in Yield /a		Percent		5%	1%	1%	1%	1%	1%				
Increase in Prices /b		Percent											
Prices - Wheat	35.12		35	37	37	37	37	37	37	37	37	37	37
Price - Wheat Straw	6.50	Rs.	7	7	7	7	7	7	7	7	7	7	7
Volume - Wheat Grain		Kgs.	1600	1,680	1,697	1,714	1,731	1,748	1,766	1,766	1,766	1,766	1,766
Volume - Wheat Straw		Kgs.	1700	1,785	1,803	1,821	1,839	1,857	1,876	1,876	1,876	1,876	1,876
Revenue from Main Crop		Rs.	56192	61,952	62,571	63,197	63,829	64,467	65,112	65,112	65,112	65,112	65,112
Revenue By Product		Rs.	11050	11,603	11,719	11,836	11,954	12,074	12,194	12,194	12,194	12,194	12,194
Self Consumption - Wheat		Kgs.	640	800	800	800	800	800	800	800	800	800	800
Self Consumption - Wheat Straw		Kgs.	850	893	893	893	893	893	893	893	893	893	893
Total Revenue		Rs.	67242	73,554	74,290	75,033	75,783	76,541	77,306	77,306	77,306	77,306	77,306
Cost of Production													
Ploughing	1200.00	No.	2.5	2	2	2	2	2	2	2	2	2	2
Cost of Ploughing		Rs.	3000	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
Planking	600.00	No.	1	1	1	1	1	1	1	1	1	1	1
Cost of Planking		Rs.	600	600	600	600	600	600	600	600	600	600	600
Seed /a	60.00	Kgs.	45	75	75	75	75	75	75	75	75	75	75
Cost of Seed		Rs.	2700	5700	5700	5700	5700	5700	5700	5700	5700	5700	5700
Sowing	1000.00	No.	1	1	1	1	1	1	1	1	1	1	1
Cost of Sowing		Rs.	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Fertilizers													
UREA	2400.00	Bag	1	2	2	2	2	2	2	2	2	2	2
Cost of Urea		Rs.	2400	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600
DAP	10000.00	Bag	1	1	1	1	1	1	1	1	1	1	1
Cost of DAP		Rs.	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
POTASH	2800.00	Bag	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cost of Potash		Rs.	0	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Agro Chemicals	500.00	No	0.5	1	1	1	1	1	1	1	1	1	1
Cost of Agrochemicals		Rs.	250	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Labour (Family)	400.00	Days	1	2	2	2	2	2	2	2	2	2	2
Cost of Labour		Rs.	400	800	800	800	800	800	800	800	800	800	800
Irrigation	2,000	Per irrigation	3	4	4	4	4	4	4	4	4	4	4
Cost of Irrigation		Rs.	6000	8000	8000	8000	8000	8000	8000	8000	8000	8000	8000
Harvesting Labour (Family)	600.00	Kg	30	32	32	32	32	32	32	32	32	32	32
Cost of Harvesting		Rs.	18000	19200	19200	19200	19200	19200	19200	19200	19200	19200	19200
Threshing	35.00	Kg	110	118	119	120	121	122	124	124	124	124	124
Cost of Threshing		Rs.	3850	4116	4157	4199	4241	4283	4326	4326	4326	4326	4326
Total Costs of Production		Rs.	48200	56417	56458	56499	56541	56584	56626	56626	56626	56626	56626
Net Value of Production		Rs.	19042	17138	17832	18533	19242	19957	20680	20680	20680	20680	20680

/a training provided and use of improved seed will increase productivity

PER ACRE FARM BUDGET -FINANCIAL (Rs.)													
WITH AND WITH OUT PROJECT													
CROP: RICE													
Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Gross Value of Production													
Increase in Yield /c		Percent		5%	1%	1%	1%	1%	1%				
Increase in Prices /e		Percent											
Prices - Rice	48.98	Rs.	49	51	51	51	51	51	51	51	51	51	51
Price - Rice Straw	6.50	Rs.	7	7	7	7	7	7	7	7	7	7	7
Volume - Rice Grain		Kgs.	1600	1,680	1,697	1,714	1,731	1,748	1,766	1,766	1,766	1,766	1,766
Volume - Rice Straw		Kgs.	1700	1,785	1,803	1,821	1,839	1,857	1,876	1,876	1,876	1,876	1,876
Revenue from Main Crop		Rs.	78368	61,952	62,571	63,197	63,829	64,467	65,112	65,112	65,112	65,112	65,112
Revenue By Product		Rs.	11050	11,603	11,719	11,836	11,954	12,074	12,194	12,194	12,194	12,194	12,194
Self Consumption - Rice		Kgs.	640	800	800	800	800	800	800	800	800	800	800
Self Consumption - Rice Straw		Kgs.	850	893	893	893	893	893	893	893	893	893	893
Total Revenue		Rs.	89418	73,554	74,290	75,033	75,783	76,541	77,306	77,306	77,306	77,306	77,306
Cost of Production													
Ploughing	1200.00	No.	2.5	2	2	2	2	2	2	2	2	2	2
Cost of Ploughing		Rs.	3000	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
Planking	600.00	No.	1	1	1	1	1	1	1	1	1	1	1
Cost of Planking		Rs.	600	600	600	600	600	600	600	600	600	600	600
Seed /a	60.00	Kgs.	45	75	75	75	75	75	75	75	75	75	75
Cost of Seed		Rs.	2700	5700	5700	5700	5700	5700	5700	5700	5700	5700	5700
Sowing	1000.00	No.	1	1	1	1	1	1	1	1	1	1	1
Cost of Sowing		Rs.	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Fertilizers													
UREA	2400.00	Bag	1	2	2	2	2	2	2	2	2	2	2
Cost of Urea		Rs.	2400	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600
DAP	10000.00	Bag	0.5	1	1	1	1	1	1	1	1	1	1
Cost of DAP		Rs.	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
POTASH	2800.00	Bag	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cost of Potash		Rs.	0	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Agro Chemicals	500.00	No	0.5	1	1	1	1	1	1	1	1	1	1
Cost of Agrochemicals		Rs.	250	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Labour (Family)	400.00	Days	1	2	2	2	2	2	2	2	2	2	2
Cost of Labour		Rs.	400	800	800	800	800	800	800	800	800	800	800
Irrigation	1,500	Per irrigation	3	4	4	4	4	4	4	4	4	4	4
Cost of Irrigation		Rs.	4500	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
Harvesting Labour (Family)	600.00	Kg	10	12	15	18	18	18	18	18	18	18	18
Cost of Harvesting		Rs.	6000	7200	9000	10800	10800	10800	10800	10800	10800	10800	10800
Threshing	35.00	Kg	110	118	119	120	121	122	124	124	124	124	124
Cost of Threshing		Rs.	3850	4116	4157	4199	4241	4283	4326	4326	4326	4326	4326
Total Costs of Production		Rs.	29700	37417	39258	41099	41141	41184	41226	41226	41226	41226	41226
Net Value of Production		Rs.	59718	36138	35032	33933	34642	35357	36080	36080	36080	36080	36080

PER ACRE FARM BUDGET -FINANCIAL (Rs.)
WITH AND WITH OUT PROJECT
CROP: MELON

Items	Price	Unit	Without Project	With Project										
				1	2	3	4	5	6	7	8	9	10	
Gross Value of Production														
Increase in Yield /a		Percent		5%	1%	1%	1%	1%	1%	1%				
Increase in Prices /b		Percent												
Prices - Melon	32.56	Rs.	32.56	34.19	34.19	34.19	34.19	34.19	34.19	34.19	34.19	34.19	34.19	34.19
Price -Melon Straw	10.00	Rs.	10	10	10	10	10	10	10	10	10	10	10	10
Volume -Melon Yield		Kgs.	5500	5,775	5,833	5,891	5,950	6,009	6,070	6,070	6,070	6,070	6,070	6,070
Volume - Melon Straw		Kgs.	0	-	-	-	-	-	-	-	-	-	-	-
Revenue from Main Crop		Rs.	179080	197436	199410	201404	203418	205452	207507	207507	207507	207507	207507	207507
Revenue By Product		Rs.	0	0	0	0	0	0	0	0	0	0	0	0
Self Consumption -		Kgs.	0	0	0	0	0	0	0	0	0	0	0	0
Self Consumption -		Kgs.	0	0	0	0	0	0	0	0	0	0	0	0
Total Revenue		Rs.	179080	197,436	199,410	201,404	203,418	205,452	207,507	207,507	207,507	207,507	207,507	207,507
Cost of Production														
Ploughing	1200.00	No.	1	1	1	1	1	1	1	1	1	1	1	1
Cost of Ploughing		Rs.	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Planking	600.00	No.	0	0	0	0	0	0	0	0	0	0	0	0
Cost of Planking		Rs.	0	0	0	0	0	0	0	0	0	0	0	0
Seed /a	450.00	Kgs.	10	10	10	10	10	10	10	10	10	10	10	10
Cost of Seed		Rs.	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
Sowing	1000.00	No.	1	1	1	1	1	1	1	1	1	1	1	1
Cost of Sowing		Rs.	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Fertilizers														
UREA	2400.00	Bag	1	2	2	2	2	2	2	2	2	2	2	2
Cost of Urea		Rs.	2400	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600
DAP	10000.00	Bag	1	1	1	1	1	1	1	1	1	1	1	1
Cost of DAP		Rs.	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
POTASH	2750.00	Bag	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cost of Potash		Rs.	0	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375	1375
Agro Chemicals	500.00	No	0.5	1	1	1	1	1	1	1	1	1	1	1
Cost of Agrochemicals		Rs.	250	250	250	250	250	250	250	250	250	250	250	250
Labour (Family)	400.00	Days	1	2	2	2	2	2	2	2	2	2	2	2
Cost of Labour		Rs.	400	800	800	800	800	800	800	800	800	800	800	800
Irrigation	2,000	Per irrigation	2	2	2	2	2	2	2	2	2	2	2	2
Cost of Irrigation		Rs.	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Harvesting Labour (Family)	600.00	Kg	10	12	12	12	12	12	12	12	12	12	12	12
Cost of Harvesting		Rs.	6000	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200	7200
Threshing	0.00	Kg	-	-	-	-	-	-	-	-	-	-	-	-
Cost of Threshing		Rs.	0	0	0	0	0	0	0	0	0	0	0	0
Total Costs of Production		Rs.	29750	32550	32550	32550	32550	32550	32550	32550	32550	32550	32550	32550
Net Value of Production		Rs.	149330	164886	166860	168854	170868	172902	174957	174957	174957	174957	174957	174957

PER ACRE FARM BUDGET -FINANCIAL (Rs.)
WITH AND WITH OUT PROJECT
CROP: FODDER

Items	Price	Unit	Without Project	With Project										
				1	2	3	4	5	6	7	8	9	10	
Gross Value of Production														
Increase in Yield /a		Percent		5%	1%	1%	1%	1%	1%	1%				
Increase in Prices /b		Percent												
Prices - Fodder	13.67	Rs.	14	14	14	14	14	14	14	14	14	14	14	14
Price - Fodder Straw	10.00	Rs.	10	10	10	10	10	10	10	10	10	10	10	10
Volume - Fodder Grain		Kgs.	7578	7,957	8,036	8,117	8,198	8,280	8,363	8,363	8,363	8,363	8,363	8,363
Volume - Fodder Straw		Kgs.	0	-	-	-	-	-	-	-	-	-	-	-
Revenue from Main Crop		Rs.	103591	114209	115351	116505	117670	118847	120035	120035	120035	120035	120035	120035
Revenue By Product		Rs.	0	0	0	0	0	0	0	0	0	0	0	0
Self Consumption - Fodder		Kgs.	1516	1516	1516	1516	1516	1516	1516	1516	1516	1516	1516	1516
Self Consumption - Fodder Straw		Kgs.	0	0	0	0	0	0	0	0	0	0	0	0
Total Revenue		Rs.	103591	114,209	115,351	116,505	117,670	118,847	120,035	120,035	120,035	120,035	120,035	120,035
Cost of Production														
Ploughing	1200.00	No.	2.5	2	2	2	2	2	2	2	2	2	2	2
Cost of Ploughing		Rs.	3000	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
Planking	600.00	No.	1.5	1	1	1	1	1	1	1	1	1	1	1
Cost of Planking		Rs.	900	600	600	600	600	600	600	600	600	600	600	600
Seed /a	500.00	Kgs.	20	20	20	20	20	20	20	20	20	20	20	20
Cost of Seed		Rs.	1200	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
Sowing	1500.00	No.	1	1	1	1	1	1	1	1	1	1	1	1
Cost of Sowing		Rs.	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Fertilizers														
UREA	2400.00	Bag	1	1	1	1	1	1	1	1	1	1	1	1
Cost of Urea		Rs.	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
DAP	10000.00	Bag	0.5	1	1	1	1	1	1	1	1	1	1	1
Cost of DAP		Rs.	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
POTASH	2750.00	Bag	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cost of Potash		Rs.	0	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Agro Chemicals	500.00	No	0	0	0	0	0	0	0	0	0	0	0	0
Cost of Agrochemicals		Rs.	0	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Labour (Family)	400.00	Days	1	2	2	2	2	2	2	2	2	2	2	2
Cost of Labour		Rs.	400	800	800	800	800	800	800	800	800	800	800	800
Irrigation	2,000	Per irrigation	2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Cost of Irrigation		Rs.	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Harvesting Labour (Family)	600.00	Kg	10	15	20	20	20	20	20	20	20	20	20	20
Cost of Harvesting		Rs.	6000	9000	12000	12000	12000	12000	12000	12000	12000	12000	12000	12000
Threshing	0.00	Kg	-	-	-	-	-	-	-	-	-	-	-	-
Cost of Threshing		Rs.	0	0	0	0	0	0	0	0	0	0	0	0
Total Costs of Production		Rs.	23900	28601	31601	31601	31601	31601	31601	31601	31601	31601	31601	31601
Net Value of Production		Rs.	79691	85609	83751	84904	86070	87246	88435	88435	88435	88435	88435	88435

/a training provided and use of improved seed will increase productivity

ANNUAL PER ASSET BUDGET - FINANCIAL (RKR.)													
LIVESTOCK (DAIRY)													
Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Incremental Increase (Yield)		Percent				4.0%	5.0%	10.0%	15.0%	20.0%	30.0%		
Increase in Prices /a		Percent											
Yield (Net of Feeding to Calf)		Liters		440	2,650	2,756	2,894	3,183	3,661	4,393	5,711	5,711	
Price - Milk	60	Rs.		60	60	60	60	60	60	60	60	60	
Price - Calves	18000	Rs.		9,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	
Milk Production - Quantity		Liters		440	2,650	2,756	2,894	3,183	3,661	4,393	5,711	5,711	
Value of Milk Produce		Rs.		26,400	159,000	165,360	173,628	190,991	219,639	263,567	342,637	342,637	
Farm Yard Manure - Quantity		Tons		1	2	2	2	2	2	2	2	2	
Value of Farm Yard Manure	1000	Rs.		750	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	
Self-Consumption of Milk /b		Liters		548	1,122	1,150	1,179	1,209	1,239	1,270	1,302	1,334	
Value of Self Consumptions		Rs.		32,850	67,343	69,026	70,752	72,521	74,334	76,192	78,097	80,049	
Calves/Young Stock		No		1	1	1	1	1	1	1	1	1	
Value of Calf at the End of Each Year		Rs.		9,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	
Labour (Current Engagement)	400	days	270	202	133	133	133	133	133	133	133	133	
Wage Earned		Rs.	108,000	80,625	53,250	53,250	53,250	53,250	53,250	53,250	53,250	53,250	
Total Value of Produce (Incl. Self Consumption)		Rs.	108,000	116,025	230,250	236,610	244,878	262,241	290,889	334,817	413,887	413,887	
Cost of Production													
Green Fodder	7	No.		5,400	6,570	6,570	6,570	6,570	6,570	6,570	6,570	6,570	
Value of Green Fodder		Rs.		38,934	45,990	45,990	45,990	45,990	45,990	45,990	45,990	45,990	
Concentrates	25	No.		1,680	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	
Value of Concentrates		Rs.		42,000	52,500	52,500	52,500	52,500	52,500	52,500	52,500	52,500	
Wheat Bran	8	Kgs.		3,000	4,745	4,745	4,745	4,745	4,745	4,745	4,745	4,745	
Value of Wheat Bran/Hay		Rs.		22,500	35,588	35,588	35,588	35,588	35,588	35,588	35,588	35,588	
Sub-total		Total Rs.		103,434	134,078	134,078	134,078	134,078	134,078	134,078	134,078	134,078	
Veterinary Medicines													
Deworming/Vaccination	350.00	No.		1	2	2	2	2	2	2	3	4	
Cost of Deworming/Vaccination		Rs.		350	700	700	700	700	700	700	1,050	1,400	
Other Vet. Medicines	350.00	No.		1	2	2	2	2	2	2	2	2	
Cost of Vet. Medicines		Rs.		350	700	700	700	700	700	700	700	700	
Labor (Family) /c	450	days		68	137	137	137	137	137	137	137	137	
Opportunity Cost of Labour		Rs.		30,797	61,594	61,594	61,594	61,594	61,594	61,594	61,594	61,594	
Total Costs of Production		Rs.		134,931	197,071	197,071	197,071	197,071	197,071	197,071	197,421	197,771	
Net Value of Production		Rs.	108,000	18,906	33,179	39,539	47,807	65,170	93,818	137,746	216,466	215,766	
Net Total Income (Without and With Project)			108,000	92,516	148,023	154,383	162,651	180,013	208,662	252,590	331,310	330,960	

/a producer price expected to rise by 2.8% during the period from 2025 - 2031 (source: Country Report, February 2024 by Economist Intelligence Unit); the trend is maintained in the analysis at this same modest level.

/b Average consumption of 3 liters per day at the household level contributing to improved nutrition status of the households

/c Livestock is looked after by women or as a household activity involving more than one member. The level of effort is estimated at 3 hours per day with a total accumulated input of 136.88 days required per year. However it is assumed that the time spent and is a wage foregone.

PER ASSET BUDGET - FINANCIAL (RKR.)													
WITH AND WITHOUT PROJECT													
GOAT													
Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Gross Value of Production													
Growth Rate		Percent			2%	2%	2%	2%	2%	2%	2%	2%	
Increase in Prices		Percent											
Price - Goat /a	3000	Rs.		3,000	3,060	3,121	3,184	3,247	3,312	3,378	3,446	3,446	3,446
Sales - Goats /b		No.		2	2	2	2	2	2	2	2	2	2
Sales Revenue - Goats (25 Kg) /b		Rs.		6,000	6,120	6,367	6,624	6,892	7,171	7,460	7,762	7,762	7,762
Milk Production		Liters		400	480	480	480	480	480	480	480	480	480
Value of Milk (Self-Consumed) /c	40	Rs.		16,000	19,200	19,200	19,200	19,200	19,200	19,200	19,200	19,200	19,200
Current Engagement	400	Days	300	160	160	160	160	160	160	160	160	160	160
Wages Earned			120,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000	64,000
Total Revenue		Rs.	120,000	86,000	89,320	89,567	89,824	90,092	90,371	90,660	90,962	90,962	90,962
Cost of Manuring & Fertilization													
Fodder - Quantity	7	Kg		4,800	4,800	4,896	4,994	5,094	5,196	5,300	5,406	5,406	5,406
Cost of Green Fodder		Rs.	-	33,600	33,600	34,272	34,957	35,657	36,370	37,097	37,839	37,839	37,839
Concentrates - Quantity	25	Kg		49	49	50	51	52	53	54	55	55	55
Cost of Concentrates		Rs.	-	1,225	1,225	1,250	1,274	1,300	1,326	1,352	1,380	1,380	1,380
Vaccination and Veterinary Care	500	Head		2	2	2	2	2	2	2	2	2	2
Cost of Vaccination and Veterinary Care		Rs.		1,000	1,000	1,020	1,040	1,061	1,082	1,104	1,126	1,126	1,126
Own Labor	450	Days		140	140	140	140	140	140	140	140	140	140
Opportunity Cost of Labor		Rs.		63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000
Total Expenses				98,825	98,825	99,542	100,272	101,018	101,778	102,554	103,345	103,345	103,345
Net Benefits				(12,825)	(9,505)	(9,974)	(10,448)	(10,926)	(11,408)	(11,893)	(12,383)	(12,383)	(12,383)
Net Total Income (Without and With Project)			120,000	114,175	117,495	117,026	116,552	116,074	115,592	115,107	114,617	114,617	114,617

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Appendix - 4: Financial and Economic Analysis

WITH AND WITHOUT PROJECT - FINANCIAL														
Small Category I Boat (<20 feet)														
Items	Price	Unit	Without Project	With Project										
				1	2	3	4	5	6	7	8	9	10	
Engine HP		HP	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Fuel - litres		Litres	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Lubricants - litres		Litres	-	-	-	-	-	-	-	-	-	-	-	-
Ice blocks - No		Block	-	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Mole share		Percent	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Boat share		Percent	40%	30%	20%	10%	5%	5%	5%	5%	5%	5%	5%	5%
Carriage/ kg - Rs		Rs.	3.0	3.00	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Trip duration - days		Days	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Trips per year - No		Number	180.0	195.0	210.0	217.5	225.0	225.0	225.0	225.0	225.0	225.0	225.0	225.0
Fish catch/ trip - kg		Kg	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0
Trash fish/ trip - kg		Kg	17.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Net saleable fish/ trip - kg		Kg	68.0	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
Fishermen (khalasi)		Number	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Captain (Skipper)		Number												
Cost of Net (Lobsters, Shrimp and Crab Catch)		Number	152,000.0	136,800.0	136,800.0	136,800.0	136,800.0	136,800.0	136,800.0	136,800.0	136,800.0	136,800.0	136,800.0	136,800.0
Fuel	284.0	Rs.	2,272.0	880.0	880.0	880.0	880.0	880.0	880.0	880.0	880.0	880.0	880.0	880.0
Lubricants	870.0	Rs.	-	-	-	-	-	-	-	-	-	-	-	-
Ice block	280.0	Rs.	-	560.0	560.0	560.0	560.0	560.0	560.0	560.0	560.0	560.0	560.0	560.0
Ration (food) - Rs	500.0	Rs.	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0	2,000.0
Cost of net/repair - Rs	400.0	Rs.	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
Loan amount		Rs.	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0	450,000.0
Cost of finance	18%	Percent	147,500.0	93,500.0	93,500.0	93,500.0	93,500.0	93,500.0	93,500.0	93,500.0	93,500.0	93,500.0	93,500.0	93,500.0
Boat lining with fats		Rs.	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0
Total shares*		Number	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Gross value of good quality fish	600.0	Rs.	40,800.0	45,900.0	45,900.0	45,900.0	45,900.0	45,900.0	45,900.0	45,900.0	45,900.0	45,900.0	45,900.0	45,900.0
Value of trash fish	100.0	Rs.	850.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0	425.0
Total value of fish/ trip - Rs		Rs.	41,650.0	46,325.0	46,325.0	46,325.0	46,325.0	46,325.0	46,325.0	46,325.0	46,325.0	46,325.0	46,325.0	46,325.0
Commission		Rs.	2,082.5	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3
Commission to Cooperative (Facilitation/Sales)	3%			1,389.8	1,389.8	1,389.8	1,389.8	1,389.8	1,389.8	1,389.8	1,389.8	1,389.8	1,389.8	1,389.8
Fisheries license/tax	4,000.0	Month	24,000.0	26,000.0	26,000.0	26,000.0	26,000.0	26,000.0	26,000.0	26,000.0	26,000.0	26,000.0	26,000.0	26,000.0
Carriage to cost by donkey/ trip - Rs		Rs.	255.0	585.0	585.0	585.0	585.0	585.0	585.0	585.0	585.0	585.0	585.0	585.0
Mole charges/ trip - Rs		Rs.	2,082.5	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3
Boat share/ trip - Rs		Rs.	16,660.0	13,897.5	9,265.0	4,632.5	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3	2,316.3
Net value/ trip - Rs		Rs.	14,951.9	20,804.4	25,535.1	30,211.7	32,569.1	32,569.1	32,569.1	32,569.1	32,569.1	32,569.1	32,569.1	32,569.1
Amount per Share/ trip - Rs		Rs.	3,738.0	5,201.1	6,383.8	7,552.9	8,142.3	8,142.3	8,142.3	8,142.3	8,142.3	8,142.3	8,142.3	8,142.3
Income per year/ share - Rs		Rs.	672,835.0	1,014,212.2	1,340,594.4	1,642,760.5	1,832,009.4	1,832,009.4	1,832,009.4	1,832,009.4	1,832,009.4	1,832,009.4	1,832,009.4	1,832,009.4
Income per month/ share - Rs			112,139.2	169,035.4	223,432.4	273,793.4	305,334.9	305,334.9	305,334.9	305,334.9	305,334.9	305,334.9	305,334.9	305,334.9

2- Mole charges and boat share are the weighted averages

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Appendix - 4: Financial and Economic Analysis

WITH AND WITHOUT PROJECT - FINANCIAL														
Small Category II Boat (< 30 feet)														
Items	Price	Unit	Without Project	With Project										
				1	2	3	4	5	6	7	8	9	10	
Engine HP		HP	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Fuel - litres		Litres	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Lubricants - litres		Litres	-	-	-	-	-	-	-	-	-	-	-	-
Ice blocks - No		Block	-	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Mole share		Percent	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Boat share		Percent	40%	35%	30%	25%	20%	15%	10%	5%	5%	5%	5%	5%
Carriage/ kg - Rs		Rs.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Trip duration - days		Days	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Trips per year - No		Number	180.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0	210.0
Fish catch/ trip - kg		Kg	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
Trash fish/ trip - kg		Kg	30.0	15.0	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Net saleable fish/ trip - kg		Kg	120.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0	135.0
Fishermen (khalasi)		Number	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Captain (Skipper)		Number	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Cost of Net		Number	228,000.0	205,200.0	205,200.0	205,200.0	205,200.0	205,200.0	205,200.0	205,200.0	205,200.0	205,200.0	205,200.0	205,200.0
Fuel	284.0	Rs.	2,840.0	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0	1,100.0
Lubricants	870.0	Rs.	-	-	-	-	-	-	-	-	-	-	-	-
Ice block	280.0	Rs.	-	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0
Ration (food) - Rs	500.0	Rs.	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0	1,400.0
Cost of net/repair - Rs	400.0	Rs.	400.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0	300.0
Loan amount	-	Rs.	600,000.0	600,000.0	600,000.0	600,000.0	600,000.0	600,000.0	600,000.0	600,000.0	600,000.0	600,000.0	600,000.0	600,000.0
Cost of finance	18%	Percent	196,666.7	124,666.7	124,666.7	124,666.7	124,666.7	124,666.7	124,666.7	124,666.7	124,666.7	124,666.7	124,666.7	124,666.7
Fat lining of boats	-	Rs.	15,000.0	15,000.0	15,000.0	15,000.0	15,000.0	15,000.0	15,000.0	15,000.0	15,000.0	15,000.0	15,000.0	15,000.0
Total shares*	-	Number	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Gross value of good quality fish - 10% increase	600.0	Rs.	72,000.0	85,050.0	85,050.0	85,050.0	85,050.0	85,050.0	85,050.0	85,050.0	85,050.0	85,050.0	85,050.0	85,050.0
Value of trash fish	100.0	Rs.	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0	1,500.0
Total value of fish/ trip - Rs	-	Rs.	73,500.0	86,550.0	86,550.0	86,550.0	86,550.0	86,550.0	86,550.0	86,550.0	86,550.0	86,550.0	86,550.0	86,550.0
Commission - Middleman	-	Percent	-	-	-	-	-	-	-	-	-	-	-	-
Commission to Cooperative (Facilitation/Sales)	3%			2,596.5	2,596.5	2,596.5	2,596.5	2,596.5	2,596.5	2,596.5	2,596.5	2,596.5	2,596.5	2,596.5
Fisheries license/tax	4,000.0	Month	24,000.0	28,000.0	28,000.0	28,000.0	28,000.0	28,000.0	28,000.0	28,000.0	28,000.0	28,000.0	28,000.0	28,000.0
Carriage to cost per Kg	3.0	Rs.	450.0	630.0	630.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0	450.0
Mole charges/ trip - Rs		Rs.	3,675.0	4,327.5	4,327.5	4,327.5	4,327.5	4,327.5	4,327.5	4,327.5	4,327.5	4,327.5	4,327.5	4,327.5
Boat share/ trip - Rs		Rs.	29,400.0	30,292.5	25,965.0	25,965.0	25,965.0	25,965.0	25,965.0	25,965.0	25,965.0	25,965.0	25,965.0	25,965.0
Net value/ trip - Rs		Rs.	33,844.8	43,565.5	47,893.0	48,073.0	48,073.0	48,073.0	48,073.0	48,073.0	48,073.0	48,073.0	48,073.0	48,073.0
Amount per Share/ trip - Rs		Rs.	4,835.0	6,223.6	6,841.9	6,841.9	6,841.9	6,841.9	6,841.9	6,841.9	6,841.9	6,841.9	6,841.9	6,841.9
Income per year/ share - Rs		Rs.	870,294.6	1,306,964.9	1,436,789.9	1,436,789.9	1,436,789.9	1,436,789.9	1,436,789.9	1,436,789.9	1,436,789.9	1,436,789.9	1,436,789.9	1,436,789.9

PER ASSET BUDGET - FINANCIAL (RKR.)													
WITH AND WITHOUT PROJECT													
STITCHING/EMBROIDERY													
Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Gross Value of Services													
Incremental Increase in Revenue		Percent		5%	8%	10%	12%	12%	12%	12%	12%		
Increase in Prices		Percent											
Prices - Stitching	550.00	Rs.	300	315	340	374	419	469	526	589	589	589	
Prices - Stitching	750.00	Rs.	300	300	300	300	300	300	300	300	300	300	
Production - Stitching		Suit		400	432	475	532	596	668	748	837	837	
Production - Embroidery		Units		300	324	356	399	447	501	561	628	628	
Revenue		Rs.		216,000	244,166	284,749	342,820	413,938	501,218	608,540	681,564	681,564	
Labour	800	Days	240										
Labour - Opportunity Cost		Rs.	192,000										
Total Revenue		Rs.	192,000	216,000	244,166	284,749	342,820	413,938	501,218	608,540	681,564	681,564	
Cost of Material and Operations													
Raw Material	90	Misc.		700	756	832	931	1,043	1,168	1,309	1,466	1,466	
Cost of Material		Rs.	-	63,000	68,040	74,844	83,825	93,884	105,150	117,768	131,901	131,901	
Utilities	20000	Annual		1	1	1	1	1	1	1	1	1	
Cost of Utilities		Rs.	-	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	
Rent of Shop	2000	Month		12	12	12	12	12	12	12	12	12	
Cost of Rent		Rs.	-	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	
Hired Labor (Helper)	200	Day		150	158	165	174	182	191	201	211	222	
Cost of Labour		Rs.	-	34,500	36,225	38,036	39,938	41,935	44,032	46,233	48,545	50,972	
Own Labor	400	Day		240	240	240	240	240	240	240	240	240	
Opportunity Cost of Own Labour		Rs.	-	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	
Total Expenses		Rs.	-	273,500	280,265	288,880	299,763	311,819	325,182	340,002	356,446	361,422	
Net Benefits			192,000	- 57,500	- 36,099	- 4,131	43,056	102,119	176,036	268,538	325,119	322,691	
Net Benefits with Own Labour			192,000	62,500	83,901	115,869	163,056	222,119	296,036	388,538	445,119	440,143	

PER ASSET BUDGET - FINANCIAL (RKR.)													
WITH AND WITHOUT PROJECT													
Skilled Persons - Employed/Wage Earning													
Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Earning Per Year													
Incremental Increase in Wages				10%	12%	15%							
Wage Rate	300.00	Rs.	300	330	370	425	425	425	425	425	425	425	
Number of Day sof Work		Days	300	300	300	300	300	300	300	300	300	300	
Annual Earning		Rs.	90,000	99,000	110,880	127,512	127,512	127,512	127,512	127,512	127,512	127,512	
Monthly Earning		Rs.	7,500	8,250	9,240	10,626	10,626	10,626	10,626	10,626	10,626	10,626	
PER ASSET BUDGET - FINANCIAL (RKR.)													
WITH AND WITHOUT PROJECT													
SELF-EMPLOYMENT/ENTREPRENEURSHIP													
Items	Price	Unit	Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Gross Value of Services													
Incremental Increase in Revenue		Percent		1%	1%	1%	1%	1%	1%	1%			
Increase in Prices		Percent											
Prices	300.00	Rs.	300	303	306	309	312	315	318	322	325	325	
Services		feet ²	500	505	510	515	520	526	531	536	536	536	
Revenue from Services		Rs.	150,000	153,015	156,091	159,228	162,429	165,693	169,024	172,421	174,145	174,145	
Total Revenue		Rs.	150,000	153,015	156,091	159,228	162,429	165,693	169,024	172,421	174,145	174,145	
Cost of Material and Operations													
Raw Material	50	Rods	200	202	204	206	208	210	212	214	214	214	
Cost of Material		Rs.	10,000	10,100	10,201	10,303	10,406	10,510	10,615	10,721	10,721	10,721	
Utilities	40000	Annual	1	1	1	1	1	1	1	1	1	1	
Cost of Utilities		Rs.	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	
Rent of Shop	3000	Month	12	12	12	12	12	12	12	12	12	12	
Cot of Rent		Rs.	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	36,000	
Hired Labor (Helper)	230	Day	300	300	300	300	300	300	300	300	300	300	
Cost of Labour		Rs.	69,000	69,000	69,000	69,000	69,000	69,000	69,000	69,000	69,000	69,000	
Own Labor	500	Day	20	20	20	21	21	21	21	21	21	21	
Opportuntiy Cost of Own Labour		Rs.	10,000	10,100	10,201	10,303	10,406	10,510	10,615	10,721	10,721	10,721	
Total Expenses		Rs.	165,000	165,200	165,402	165,606	165,812	166,020	166,230	166,443	166,443	166,443	
Net Benefits			- 15,000	- 12,185	- 9,311	- 6,378	- 3,384	- 327	- 2,793	- 5,978	- 7,703	- 7,703	
Benefits with Own Labour			- 5,000	- 2,085	890	3,925	7,022	10,183	13,409	16,700	18,424	18,424	

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 5: Social Environment and Climate Assessment (SECAP) Review Note

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

The SECAP Review note should build on the preliminary note mentioned above, draw on the results of the screening exercise and be informed by the issues raised during the design mission, the stakeholders interviews, publicly available tools and dataset, and environmental, social or climate-related studies that inform on the characteristics of the project location. The SECAP review note includes the revised ESMP and should be attached to the Project Design Report, integrated in Draft Project Implementation Manual (PIM) and COSTAB and shall be submitted to Design Review Meeting (DRM) or IRC (for NSOs).

1. Introduction

1. Sindh Coastal Resilience Project, a co-financed project by ADB and IFAD (parallel-financing modality), will be implemented in three poorest districts of Sindh province, namely Sujawal, Thatta and Badin. IFAD will finance the Livelihoods component. The ecosystems of these districts are especially affected by intensified farming systems with poor drainage facilities along the Indus river (including the shrinking delta zone) leading to increasing salinity and waterlogging of agricultural lands, poor quality of groundwater, coupled with a limited access to irrigation water. This situation exacerbates vulnerability to climate change and the targeted zone faces multiple climate-related impacts including cyclones, tornadoes, floods, and droughts. Fishing and agriculture are the common sources of livelihood but a large majority of the population is landless or own small landholdings. The majority of fishermen work as hired hands on boats owned by others. The proposed project is aimed at developing sustainable climate resilient livelihoods for target agriculture and fisheries dependent poor communities in the selected three districts.
2. The IFAD Concept and Design Missions met the concerned departments in Sindh and visited representative agriculture and fishing communities in the proposed project area for preliminary consultations and data collection. This SECAP review note is prepared based on information obtained during the meetings and available secondary sources of information and literature to identify potential social, environmental, and climate risks to the project and possible impacts of the project. It contributes to the project design, in particular with providing (i) an Environmental, Social and Climate Management Plan (ESCMP), (ii) a Stakeholder Engagement Plan together with the Grievance Redress Mechanism, and a (iii) Targeted Adaptation Assessment. These three documents are annexed to the Project Implementation Manual and the current SECAP review note.

2. Situational analysis and potential project impacts

3. Sindh is located in the South-eastern region of Pakistan and is the third-largest province of the country by land area and the second-largest province by population. Balochistan borders it to the west and north-west and Punjab to the north. It shares an international border with the Indian states of Gujarat and Rajasthan to the east; it is also bounded by the Arabian Sea to the south. Sindh's landscape consists mostly of alluvial plains flanking the Indus River, the Thar Desert in the eastern portion of the province along the international border with India, and the Kirthar Mountains in the western portion of the province.
4. The economy of Sindh is the second largest in Pakistan after Punjab; its provincial capital of Karachi is the most populous city in the country as well as its main financial hub. Sindh is home to a large portion of Pakistan's industrial sector and contains two of the country's busiest commercial seaports: Port Qasim and the Port of Karachi. The remainder of Sindh consists of an agriculture-based economy and produces fruits, cereals, cotton, sugarcane and vegetables for internal consumption and export to other parts of the country.
5. The biodiversity of Sindh is unique due to the presence of various ecosystems and diverse range of landscapes which includes deserts, wetlands, riverine and mangrove forests, irrigated agricultural and coastal areas. There are several important wetlands in Sindh of which 10 are Ramsar sites. They support a large number of water birds during the migratory season. However inland and coastal areas (mangrove) are highly degraded due to water withdrawal and pollution from the upstream of Indus, and limited space given to natural ecosystems.

2.1 Socio-economic assessment

a. Overall poverty situation

6. Pakistan is the fifth most populous country in the world (207.68 million inhabitants). The population of Sindh was about 48 million in 2017 and was growing at the rate of 2.41 percent per annum (Census 2017). About 48 percent of the population is rural.
7. Owing to its proximity to the coast, Sindh is considered an economic hub of Pakistan and generates about 27 percent of the country's GDP. However, 37 percent of its rural population lives below the poverty line, which is higher than the national average. The socio-economic situation of each of the three districts in Sindh is provided in Table 1 and 2 below. The situation is quite similar for all the districts. The population of the project area is predominantly rural (78 to 89 percent of the district population) and the majority live in poverty (82 to 86 percent of the population is multidimensionally poor).
8. Thatta has the highest score of multidimensional poverty index (0.6) in Sindh followed by Badin and Sujawal (0.5 each). A study on asset-based poverty index showed that tehsils of the Badin district such as tehsil Golarachi (0.78), Tandobago (0.76), and

tehsil Malti (0.75) are the poorest whereas Thatta also showed high asset-based poverty^[1]. Badin is considered with high incidence of poverty where 40 percent of population live below poverty line^[2]. A significant 69.0 percent of household members in District Thatta are in severe poverty^[3]. This essentially means that 69.0 percent of household's members in District Thatta are deprived on at least half of the weighted indicators (education, health and living standards). The dire situation contradicts with its closeness to Karachi urban centre and the large economic and market opportunities it brings to these districts (particularly, to Thatta). On a provincial level, Sindh has the highest incidence of poverty amongst women at 45 per cent with a mean poverty score of 20.26 per cent. Root causes of this are related to women's low asset base, especially in rural areas of Sindh, where there are large differences in landholdings between men and women^[4].

9. While the majority of the population owns its housing (Badin 80, Sujawal 93 and Thatta 88 percent), the majority is not climate-proof (with a slight better situation in Thatta). Open defecation is still common, in particular in Sujawal (82 percent of households), against 66 in Badin and 58 in Thatta, with a clear correlation to access to sanitation. Cooking still relies on unclean fuels like unprocessed coal.
10. The literacy rate in Sindh is below the national average and with a clear gap between men and women in the project area. In addition, school access is limited, in particular in Thatta (from 11.9 schools per 1000 households in Sujawal to 4.7 schools per 1000 households in Thatta).
11. Land ownership is highly skewed with 18 / 15 percent of households owning 58 / 52 percent of the land (respectively in Badin and Thatta+Sujawal) and big landlords influence the agricultural and social situation. Majority of households are peasants, either smallholders, sharecroppers and tenants (named *haris*) or landless daily wagers. Most of the small farm holdings are owner operated, while medium- and large-size farms are generally operated by *haris*. *Haris* have no clear and legally enforceable tenure, making their livelihoods uncertain, and leaving them vulnerable to poverty and exploitation. Landlords can abuse their position of power over *haris*^[5]. Fisherfolk live in coastal communities, mostly in shanty houses built on state land with no ownership rights.

Table 1. Brief profiles of Thatta, Sujawal and Badin districts

Particulars	Badin	Sujawal	Thatta
Talukas (No.)	5	5	4
Union Councils (No.)	68	37	55
Villages (No.)	497	388	655
Area (sq km) / % of province	6,470/4.6	7,335/5.2	7,705 /5.5
Population (million) / % provincial population	1.8 /3.8	0.78 /1.6	0.98 /2
Population Density per sq km	279	106	127
Rural population (%)	78	89	82
Households (No.)	359,376	153,018	184,868
Male-Female ratio	52:48	52:48	52:48
MD Poverty headcount (%)	82	85	86
Own a house (%)	80	93	88
Climate Proof Housing (%)	23	21	40
Prevalence of open defecation (%)	66	82.4	58

Access to sanitation (% HHs)	25	17	24
Cooking on clean fuels (%HHs)	11.6	9.8	27
Literacy rate (percent) at district / province level for Male & Female	32/59 (M) // 16.5/41 (F)	28/59 (M) // 10.1/41 (F)	26.5/59 (M) // 14.3/41 (F)
Schools (No.)	3,127	1,829	873
Shelter less Schools (No.)	686	498	161
Non-functional schools (No.)	600	865	699
Irrigated area (%) [a]	61	--	89.5
Livestock ownership (%HHs)	28	13.2	41.6
Fishermen (No.) [a]	4,023	--	6,922
Boats (No.) [a]	287		1,031
Sail	17	--	456
Row	270		575
Industrial units (No.) [a]	6	--	17
[a] Absence of data for Sujawal, reflects that the district was combined with Thatta some years ago.			

Source: Sindh District Profiles 2021

Table 2: Farm/Land ownership Pattern and Share in Target Districts

Farm Size	No of Farms	% of Farms	Farm area	% of Farm area
Badin District				
Under 1.0	240	-	116	-
1 to 2.5	6,279	9	10,656	1
2.5 to 5.0	17,391	24	63,643	6
5.0 to 7.5	12,493	17	73,221	7

7.5 to 12.5	12,317	17	112,360	10
12.5 to 25.0	11,209	15	213,411	19
25.0 to 50.0	9,456	13	311,368	28
50.0 and above	3,315	5	331,528	30
Total Badin	72,701	100	1,116,306	100
Thatta/Sujawal				
Under 1.0	57	-	30	-
1 to 2.5	9,012	21	15,323	3
2.5 to 5.0	8,825	21	31,369	5
5.0 to 7.5	4,969	12	28,324	5
7.5 to 12.5	6,686	16	62,481	11
12.5 to 25.0	7,328	17	137,381	24
25.0 to 50.0	4,512	11	148,097	26
50.0 and above	1,560	4	147,625	26
Total Thatta/Sujawal	42,949	100	570,630	100

Source: Sindh District Profiles 2021

12. The incidence of poverty rises with family size and dependency ratio and falls with age of household head. Similar is the case with the schooling of household heads and spouses. Poverty incidence is lowest for landowners, followed by sharecroppers and highest for the landless. It is also lower for households owning livestock and higher for households without livestock. Female-headed households receiving no remittances suffer the highest incidence, followed by households receiving remittance from domestic sources; those receiving remittances from foreign sources experience the least poverty. Details are provided in Table 3.

Table 3. Indicators of poverty in Sindh and national level

Indicators	Percentage below the Poverty Line

		Sindh	Pakistan
Family Size	<5	26.54	18.86
	6-9	50.44	43.10
	>9	55.36	47.13
Dependency ratio	<50%	18.48	9.66
	51-99%	44.57	35.94
	>100	49.93	46.99
Age of household head	25-45	41.81	35.83
	46-65	45.58	34.39
	>65	37.91	28.32
Schooling of head	illiterate	51.49	41.67
	1-5 years	44.73	34.33
	6-10 years	34.62	25.01
	11-12 years	17.88	13.03
	12 years	13.01	8.16
Schooling of spouse	Illiterate	45.12	36.86
	1-5 years	29.56	24.09
	6-10 years	22.65	16.43
	>10 years	7.46	3.36
Land tenure type	Land owner	18.44	21.12
	Sharecropper	45.62	33.59
	Landless	50.25	41.57
	<13 acres	20.90	22.38

Farm size	>13 acres	9.22	8.70
Livestock ownership	Yes	35.46	29.61
	No	50.99	38.79
Female headed household	Receiving no remittance	67.99	41.62
	Receiving domestic remittance	56.15	24.01
	Receiving foreign remittance	45.56	8.46

Source: Sindh Poverty Reduction Strategy 2018

[1]Ullah, K., Chishti, M.Z. Spatial distribution of poverty in Pakistan: an asset-based approach. *Futur Bus J* 9, 2 (2023) <https://fbi.springeropen.com/articles/10.1186/s43093-022-00162-4>

[2]Clustered deprivation: District Profile of Poverty in Pakistan. SDPI 2012.

[3]Sindh District Profiles 2021, Planning and Development Department, Government of Sindh.

[4]Sindh Gender Equality & Women's Empowerment Policy 2019-2020

[5]Gazdar, H. and Mallah, H.B. 2010. Residential Security as Social Protection. *Institute of Development Studies Bulletin*, 41(4), pp. 42-51. <https://opendocs.ids.ac.uk/opendocs/handle/20.500.12413/7842>

b. Gender

13. Gender inequality is of significant concern where, according to the Global Gender Gap Index Report 2022, Pakistan ranks 145/156 for economic participation and opportunity, 135/156 for educational attainment, 143/156 for health and survival, and 95/156 for political empowerment. While new policy frameworks have been introduced in the past years (e.g National Gender Policy Framework 2022), structural and systematic gender-based discrimination is still widespread. Women continue to face significant challenges in terms of food security, education, and mobility and access to resources and finance, which limit their livelihoods choices. Rural women's work largely remains informal, unrecognized, unpaid or underpaid and when looking at specifically the agricultural sector, women's empowerment is strongly linked to lack of ownership and control over of assets and control over income earned[1].
14. Women account for a mere 23 percent of the formal labor force while men make up 85 percent of the labor force[2]. Out of these paid labourers, almost 73 per cent are employed in fishing, agriculture and forestry[3]. Despite the fact that the agricultural sector is the largest employer of female workers in Pakistan, the returns of their labour are low. Only an estimated 19 per cent of women who work in agriculture are in paid employment and 60 per cent work as unpaid workers on family farms and enterprises[4]. On average, a Pakistani woman's income is 16.3 percent of a man's income[5].
15. Approximately 2.02 million women are in the labor force in Sindh, which is only 12.1 percent of the total female population, compared to 68.5 percent of men who are in the labor force[6]. However, as with the national statistics, it is difficult to ascertain women's actual labor force participation and economic contributions because many informal sectors in which women work are not included in such surveys. Within the formal sector, a majority of women work in manufacturing, followed by community, social, and personal services sectors like education and health[7]. Overall unemployment rate in the Sindh province is 3.9 percent, with an unemployment rate of females almost double of males (6.6 percent vs 3.3 percent). This rate is substantially higher in urban areas than rural (5.9 percent vs 2.1 percent)[8].
16. While a growing number of young men are migrating to cities and towns in and outside Pakistan, women play an increasing role in the Sindh agricultural sector[9]. As a consequence, a number of tasks, such as weeding, livestock rearing, and local food processing and conservation, are now mainly done by women. This is in addition to an extensive number of domestic responsibilities, which include fetching water for household use, sometimes from long distance. For every one hour a man spends on unpaid care and domestic work, Pakistani women spend 11 hours doing the same. On average, women in rural Sindh work for 12 to 14 hours a day[10].
17. While women's role in agriculture has become more and more significant in Sindh, they very rarely own the land they cultivate. According to a survey from 2019, 98.7 percent of women in rural Sindh did not own land[11]. In addition, gender-based social norms restrict women's mobility and access to extension services. For example, services to train women in agricultural practices are conducted in closed spaces due to mobility constraints. This in turn stops women from participating in field demonstrations[12].

18. Women who work in the fisheries sector face large gender wage gaps and gender-related resistance, because access to fishing sites (i.e. tenure access rights), fishing quotas, and licenses are often traditionally reserved for men^[13]. Recent studies about women's specific roles in the sector are lacking, however, a study from 2016 in the coastal areas of Ibrahim Hyderi, Rehri Goth and Arkanabd near Karachi showed that 77.99 percent of the women employed in the fishing industry were engaged in shrimp peeling and cleaning, 6.8 percent were making fishing nets, 4.2 percent were involved in packing fish in boxes, 2.27 percent were making *chatai* (rugs) and 1.62 percent were engaged in taking out scallop from seashells^[14].
19. The overall provincial level literacy rate was 61.8 percent, male and female rates were 72.9 and 49.7 percent, respectively in 2020-21. There is a big disparity between male and female literacy in rural and urban Sindh where only 26.8 percent of rural women have education of 10 years or above as compared to 58.8 55 percent of men whereas urban rates are 85.2 and 69.9 percent for male and female in 2020-21^[15]. Education levels further deteriorate in the target districts of Badin and Thatta. According to Sindh Profile 2021, male literacy rate in Badin was 32.8 percent female was 16.5 percent. Thatta district had male literacy rate of 26.5 percent while female rate was 24 percent^[16]. Sujawal had male literacy rate of 28 percent compared to 10.1 percent of females. While addressing the low literacy rates and promoting skill enhancement opportunities among women is vital, on its own, education and training is not an impetus for women's empowerment especially in the rural areas if opportunities for especially for off-farm employment are not accessible^[17].
20. There are challenges in consistent data availability on gender-based violence, however, the available data show that 32 percent of women have experienced violence in Pakistan and around half of these women never sought help or told anyone about the violence they had experienced^[18]. Young girls are often considered an economic burden by families living in poverty and benefits of marriage are seen to be higher than its costs. The recorded prevalence of child marriage is highest in Sindh compared to other provinces, at 31 percent^[19]. Furthermore, statistics suggest that 15 percent of women aged between 20-24 years are also married to a man ten years older to them. Across provinces, Sindh has also a higher percentage of adolescent childbirth, especially in rural areas with 52 percent of women who were between 15-19 years at first birth^[20].

[1]Measuring women's disempowerment in agriculture in Pakistan. Ahmad, Nuzhat and Khan, Huma. 2016. IFPRI Discussion Paper 1512

[2]Pakistan Bureau of Statistics. 2018. Labor Force Survey 2017-18

[3]Ministry of Planning, Government of Pakistan, National Gender Policy Framework

[4]ibid.

[5]UN Women Pakistan - *Economic Empowerment and Sustainable Livelihood* Retrieved January 22, 2023 (<https://asiapacific.unwomen.org/en/countries/pakistan/economic-empowerment-and-sustainable-livelihood>)

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[7]Sindh Commission on Status of Women, Strategic Plan 2022-24

[8]Pakistan Labour Force Survey 2018-19

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[10]Women in Agriculture in Pakistan 2015 <https://www.fao.org/3/i4330e/i4330e.pdf>

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[17]Measuring women's disempowerment in agriculture in Pakistan. Ahmad, Nuzhat and Khan, Huma. 2016. IFPRI Discussion Paper 1512

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[19]Sindh Gender Equality & Women's Empowerment Policy 2019-2020

[20]UN Women Pakistan - Young women in Pakistan Status Report 2020

<https://asiapacific.unwomen.org/sites/default/files/Field%20Office%20ESEAsia/Docs/Publications/2020/11/pk-Young-Women-in-Pakistan-Status-Report-2020.pdf>

c. Youth

21. About 64 percent of Pakistan's population is below the age of 30 while 29 percent ages between 15 and 29 years (official definition for youth in Pakistan), which makes it one of the youngest countries in the world and second in South Asia after Afghanistan. Regarding literacy, 29 percent of young people are illiterate and only 6 percent have more than 12 years of education. While 39 percent are employed (32 of them males and 7 females), 57 of 100 youth (16 males and 41 females) are neither working nor seeking jobs, and only 4 percent are unemployed and actively looking for work^[1].
22. According to the Youth Policy of Sindh (2018), youth population of Sindh aged between 15 and 29 years was 26.28 percent of the total provincial population. Out of them 52.4 percent were male, and 47.6 percent were female. These numbers are growing at the rate of more than 2 percent per year. Using Labor Force Survey data of 2020-21, Gallup Pakistan has shown that the overall unemployment rate of youth in Sindh is 3.9 percent. The survey also showed that the distribution of unemployed youth was highest at 22.2 percent for 10 years of education but below 12 years of education, while this rate was the lowest (0.1 percent) for youth having MPhil/PhD degree followed by those belonging to 'less than one year of education' (0.4 percent). Unemployment among the educated females having a university degree (engineering, medicine, computer, agriculture degree in other subjects and Masters, M Phil and PhD) was 21.9 percent as compared to 20.3 percent of males with the same education level. Agriculture is the main employment provider for young people in Sindh (39.3 percent; of which 28.8 p.p. Male and 10.5 p.p. female).
23. The Sindh Youth Policy (2018) emphasizes on economic empowerment of youth with short and mid-term strategies for information and awareness about employment sectors, mapping of skills and demands of different sectors in job markets, provision of hassle free loans for business, promotion of gender equity and equality and promotion of rights of the vulnerable youth groups.
24. The Policy also highlights that "early marriages and various forms of physical and customary violence against women" is another fundamental challenge of the region. In rural Sindh, the median age for girls to be married is 17.9 years.
25. The enabling environment for young women in Pakistan faces challenges in both legal and social aspects, hindering their development and empowerment. Despite landmark legislation addressing issues like anti-women practices, "honour" killing, and domestic violence, barriers persist due to weak implementation, inadequate support systems, poor coordination, weak data monitoring, and lack of accountability. Both formal and informal institutions contribute to gendered norms prioritizing marriage over education and employment. Social protection policies acknowledge young women but often exclude unmarried ones. Decision-making for young women is largely dependent on male family members, limiting their pursuit of aspirations.
26. Despite this, young women in the Sindh province are experiencing a growth in terms of being involved in the decisions about their education (from 19% in 2013, to 24% in 2018) and on the independence to decide to seek jobs or take up paid employment (19% to 29%). Sindh was the only province that witnessed an improvement in these aspects. Sindh is also the province with the targets percentage of women controlling their own cash earnings, either by themselves (51%) or jointly with the husband (41%). Furthermore, 53% of the households reported that their also take joint decision regarding the husband earnings (the highest province in Pakistan)^[2].
27. Progress in literacy rates and school enrollment is noted, with higher literacy rates for younger girls. However, a significant portion of female youth is not in education, employment, or training, especially in rural areas. Economic participation is low among young women, with a gender wage gap of 50 percent. Only 9% of young women have digital access, and financial inclusion is influenced by factors such as education and technology literacy.

^[1]Unleashing the potential of a young Pakistan UNDP (2018) <http://hdr.undp.org/en/content/unleashing-potential-young-pakistan#>

^[2]Young Women in Pakistan - Status Report 2020 UN Women Pakistan

d. Indigenous peoples

28. Generally, it is recognized that the only indigenous people in the region are the Kelash people living in Chitral district of Khyber Pakhtunkhwa province and all others are called tribes or ethnic groups living across the country like Punjabis, Pashtuns, Sindhis, Seraikis, Muhajirs, Balochis and others. The main groups of tribal peoples in the area are the tribal fishing peoples, the pastoral groups of the Middle Indus Valley, the Baloch tribes, fisherfolk of coastal areas, tribal peoples of Sindh, tribal peoples of Gilgit-Baltistan, tribal peoples of Pothohar Region, and the tribal peoples of Khyber Pakhtunkhwa. Major ethnic groups in the order of ranking are Punjabis making 44.7 percent of the country population, Pashtuns 15.4 percent, Sindhis 14.1 percent, Seraiki 8.4 percent, Mohajir 7.6 percent, Baloch 3.6 percent and other minority groups 6.2 percent.
29. Cultural Heritage: Makli Necropolis is one of the largest [funerary sites](#) in the world, spread over an area of 10 kilometres near the city of [Thatta](#), in the province of [Sindh](#). The site houses approximately 500,000 to 1 million tombs built over the course of a 400-year period. Makli Necropolis features several large funerary monuments belonging to royalty, various [Sufi](#) saints, and esteemed scholars. [UNESCO World Heritage Site](#) notes that the "historical monuments at Makli, Thatta testify in an outstanding manner to the civilization of the Sindh region from the 14th to the 18th centuries"^[1].

^[1]UNESCO World Heritage Convention <https://whc.unesco.org/en/list/143>

e. Marginalised groups

30. N/A

f. Nutrition

31. According to Pakistan Nutrition and Humanitarian Overview 2022 conducted by UNICEF, Pakistan has a global acute malnutrition (GAM) rate of 17.7 per cent, exceeding the emergency threshold. Drought-like conditions affecting 5 million people in Sindh and Balochistan provinces and repeated cycles of heavy monsoon rains and floods in all provinces are contributing to malnutrition and food insecurity. Food insecure households in Pakistan are 71 percent and lack of access to basic services including health, nutrition, safe drinking water and sanitation are contributory factors to worsening of malnutrition. An exceedingly high percentage (40.2 percent) of children are stunted and 28.9 percent children are underweight. Micronutrient deficiencies also remain at high levels including iron, Vit-A and Vit-D. Women in reproductive age (15–49) years bear a double burden of malnutrition accounting for one in seven (14.4 percent) being undernourished, while 41.7 percent are anaemic and majority (79.7percent) are Vit-D deficient. All these factors are expected to be further aggravated by the overall negative influence of the present situation on the nutrition status of children and women.
32. The Sindh province continues to experience high rates of malnutrition among children under the age of five, teenage girls, and women of reproductive age (<49 years). In particular, children in rural areas have the highest prevalence of stunting (45.5 percent) and wasting (23.2 percent). The prevalence of vitamin A deficiency among children under five in Sindh is 57.8 percent, with a higher prevalence in rural areas (61.5 percent). Severe vitamin A deficiency is present in 14.2 percent of children in Sindh, with a higher prevalence in rural areas (16.4 percent). Among children <5 years, anaemia is prevalent in 51.2 percent of the Sindh under 5 population, with a higher prevalence in rural areas (61.2 percent). However, severe anaemia is less common, with a prevalence of 1.7 percent and 2.2 percent in rural areas. Adolescent girls have the highest prevalence of underweight (16.6 percent) compared to other provinces. The highest prevalence of underweight is found in Sujawal (45.2 percent). Among women of reproductive age, the proportion of women achieving minimum dietary diversity is lowest in Sindh (16.5 percent) compared to other provinces^[1].
33. There is a positive correlation between minimum dietary diversity and socio-economic level. The proportion of women with diverse diets is lowest in the poorest households compared to the wealthiest quintiles. The prevalence of underweight among women and girls of reproductive age has increased from 17.1 percent in 2001 to 23.2 percent in 2018. However, there has been a decline in the proportion of women with normal BMI from 53.2 percent in 2001 to 46.1 percent in 2018. The prevalence of overweight has increased from 18 percent in 2001 to 19.9 percent in 2018. The prevalence of obesity was 11.8 percent in 2001, decreased to 10 percent in 2011, and remained steady thereafter (10.2 percent in 2018). In 2018, 53.3 percent of non-pregnant women and 43.5 percent of pregnant women in Sindh were anaemic. The highest prevalence of underweight was found in Sujawal (45.2 percent), followed by Thatta (36.3 percent).
34. In Sindh, malnutrition is a serious issue affecting 3.4 million or 1 out of 2 (50 percent) children under the age five. Children in the Hyderabad division that also includes the districts of Badin, Thatta and Sujawal are more likely to be stunted (63.5 percent) than those in other divisions. It is lowest in Karachi division (34.2 percent). As reported by the latest report Sindh Equity Profile prepared by UNICEF in 2022, the prevalence of stunting is higher in rural areas (57 percent) than in urban areas (42 percent). Children whose mothers have no or pre-school education (57 percent) are more likely to be stunted than those who have above secondary level of education (30 percent). The prevalence of stunting is the highest among the poorest quintile (61 percent); and gradually decreases as it moves from the poorest to the richest quintile (31 percent). The prevalence of stunting varies by districts: highest in Sujawal (73 percent) which is adjacent to Karachi while it is the lowest in Karachi Central (25 percent). The prevalence of minimum acceptable diet for children of 6-23 months increased slightly from 9 percent in 2014 to 12 percent in 2018-19. Food insecurity is markedly high amongst women-headed households as compared with households headed by men, while 35 percent of women-headed households do not meet the Minimum Dietary Diversity of Women (MDD-W) based on 10 food groups, as compared to 29 percent of men-headed households in Sindh^[2].
35. Sindh has the highest proportion of iron deficiency anaemia with about a quarter (23.8 percent) of all women of reproductive age affected^[3]. Sindh shows higher levels of pregnancy-related deaths (345 per 100,000 live births) and maternal mortality rate (224 per 100,000 live births) compared to Punjab (219 deaths per 100,000 live births and maternal mortality rate of 157 per 100,000 live births) and Khyber Pakhtunkhwa (175 deaths per 100,000 live births and maternal mortality rate of 165 per 100,000 live births)^[4]. Only 32.7 percent of children received age-appropriate vaccinations with the majority being urban (39 percent compared to 27 percent in rural areas), from more educated households (47 percent with tertiary education compared to 26 percent with no education) and higher wealth quintiles (58 percent in the highest quintile compared to 22 percent for the lowest).
36. Sanitation is poor in Sindh. As per Pakistan Social and Living Standards Measurement (PSLM) survey 2019-20 in Sindh, Tharparkar, Thatta, Umer Kot, Sajawal and Badin have the highest number of households without toilets i.e., more than 30 percent. According to Sindh MICS 2018-19, only 58.8 percent of the population have access to basic sanitation facilities.
37. Moreover, sufficient water was not always available for hand washing, nor was soap or any other cleaning agent always present, implying that many of the residents were not washing their hands with soap^[5]. An estimated 84.5 percent of urban households have access to both improved drinking water and improved drinking water and improved sanitation facilities, whereas only 36.9 percent of rural areas in Sindh have the same access.

[1] Pakistan National Nutrition Survey 2018, MOH Pakistan, UNICEF, [https://www.unicef.org/pakistan/media/2826/file/National percent20Nutrition percent20S](https://www.unicef.org/pakistan/media/2826/file/National%20Nutrition%20Survey%202018.pdf)

[2] IPC Food Insecurity Analysis for Jamshoro, Sanghar, Umerkot and Tharparkar Districts of Sindh <http://resourcecenter.nhnpakistan.org/phocadownload/INGOs/research/Presentation%20on%20IPC%20Acute%20Analysis-Final%20Results-%2025%20July%202017.pdf>

[3] National Nutrition Survey 2018

[4] Sindh Integrated Health and Population Project, Fact sheet. World Bank 2022

<https://www.worldbank.org/en/news/factsheet/2022/12/19/factsheet-sindh-integrated-health-and-population-project>

[5] Rural Sanitation Up-Scaling through PATS Plus Programme in Badin, Tharparkar and Sujawal, Sindh. UNICEF 2023

2.2 Environment and climate context, trends and implications

38. Located in the Indus delta, the three districts of Thatta, Sujawal and Badin are characterized by both the aridity of its climate (average annual precipitation between 180 mm and 300 mm in Sindh) and the presence of water (Sea, and the Indus River fed by the monsoon season and melting of Himalayan snow upstream). This coastal plain is known for hosting one of the largest mangrove forests of the world and a rich biodiversity namely of birds and fishes. Agriculture and fishery have long made the most of this fertile land and coast. However, the three districts have been progressively facing significant degradation of their ecosystems for the past 60 years. If the root causes of this situation are multifactorial, their impact on agriculture, biodiversity and livelihoods are significant and increase climate vulnerability of communities.

a. Environmental assessment

Landscapes and biodiversity

39. The deltaic plains of Sindh lie in the Lower Indus valley. This very flat zone, known to be fertile, consists of alluvium, trenched with river channels in some places and overridden by raised terraces in others. It is the end of the transboundary Indus River Basin plain that covers 65 percent of Pakistan (FAO Aquastat). Due to its unique topography and hydrology, the basin and its delta are prone to severe flooding during the monsoon season.
40. Mangroves are spread over 0.84 m ac (0.344 million ha) and are protected under the 1927 Forest Act by the Government of Pakistan. The 342 km long and 50 km wide coastal belt along the Arabian Sea is a complex and distinct environment, pre-dominated by the Mangrove ecosystem. Badin, Sujawal, Thatta and Karachi districts coast is covered by 180,310 ac (73,000 ha) of Mangroves of the Indus which are ranked as the 6th largest contiguous freshwater mangroves worldwide. Mangroves form a unique assemblage of flora and fauna, providing a complex detritus-based food web for a number of marine and brackish water organisms. They serve as breeding grounds for fish and shrimp, protect Karachi and Bin Qasim ports from silting, and the city of Karachi from tsunamis. The main tree species growing in these forests is *Avicennia marina* which is locally known as timer and forms 97 percent of the total Mangrove tree cover. Other species are *Rhizophora macronata*, *Ceriops tagal*, and *Aegiceris corniculata*.
41. However, this mangrove is at risk: overgrazing, fuelwood collection, pollution, and above all, acute scarcity of freshwater and sediments from the Indus River generate huge damage that the past reforestation campaigns carried out since 2010 have barely addressed, causing multiples additional threats including biodiversity losses, erosion and sea level rising.
42. **Forests:**^[1] Total forest cover in the province is 2,553,980 ac (1,034,000 ha) where four different types of forests are found. (a) Riverine forests occur along the protective embankments on both sides of River Indus. These forests rely on inundation by River Indus for irrigation and, therefore, their existence is heavily dependent on the intensity, duration, and frequency of river water flow. Riverine forests are the mainstay of forestry in Sindh. Besides providing a source of livelihood for thousands of people, these forests provide fuel wood, timber, fodder, honey, and tannin. Moreover, they serve as carbon sinks and also protect the surrounding areas from the severity of floods. (b) Irrigated forests are canal irrigated plantations and are also known as Inland forests. These are covering over 203,306 ac (82,310 ha). Eucalyptus is the most common tree species of irrigated forests. Other common trees are semul, mulberry, java plum and lead tree (used as fodder).
43. **Biodiversity and protected areas:**^[2] Wildlife surveys were undertaken in the prime wildlife habitats of Sindh during 2010 – 2018 and a total of 82 species of mammals, 420 species of birds, 103 species of reptiles, 7 species of amphibians and 33 important plant species were recorded from these areas. The key species include: Sind Wild Goat, Urial, Chinkara deer, Leopard, Bluebull, Hog Deer, Hyena, Caracal, Honey Badger, Fishing Cat, Desert Fox, Indus Dolphin, Humpback Dolphin, Indian Peafowl, Sarus Crane, Houbara Bustard, Marbled Teal, Grey Partridge, Chakur, Indian Whitebacked Vulture, Indian Longbilled Vulture, Shaheen Falcon, Marsh Crocodile, Green Turtle, Olive Ridley Turtle, Indian Python, Desert Monitor, Fat tailed Gecko, Spiny tailed Lizard and Freshwater Turtles. This unique and rich wildlife, due to the presence of various ecosystems and diverse range of landscapes including deserts, wetlands, riverine and mangrove forests, agriculture and coastal areas, has been protected in a network of protected areas spread over different ecosystems. Sindh counts 50 Protected Areas (One National Park, 33 Wildlife Sanctuaries and 16 Game Reserves), 10 Ramsar Sites, 19 IBAs and three Eco-regions representing the major ecosystems of the province (Figure 1). Many of these are located in Thatta district which is one of the three target districts. However, degradation of the ecosystems and poaching affect this wildlife: a total of 40 threatened wildlife species have been recorded.

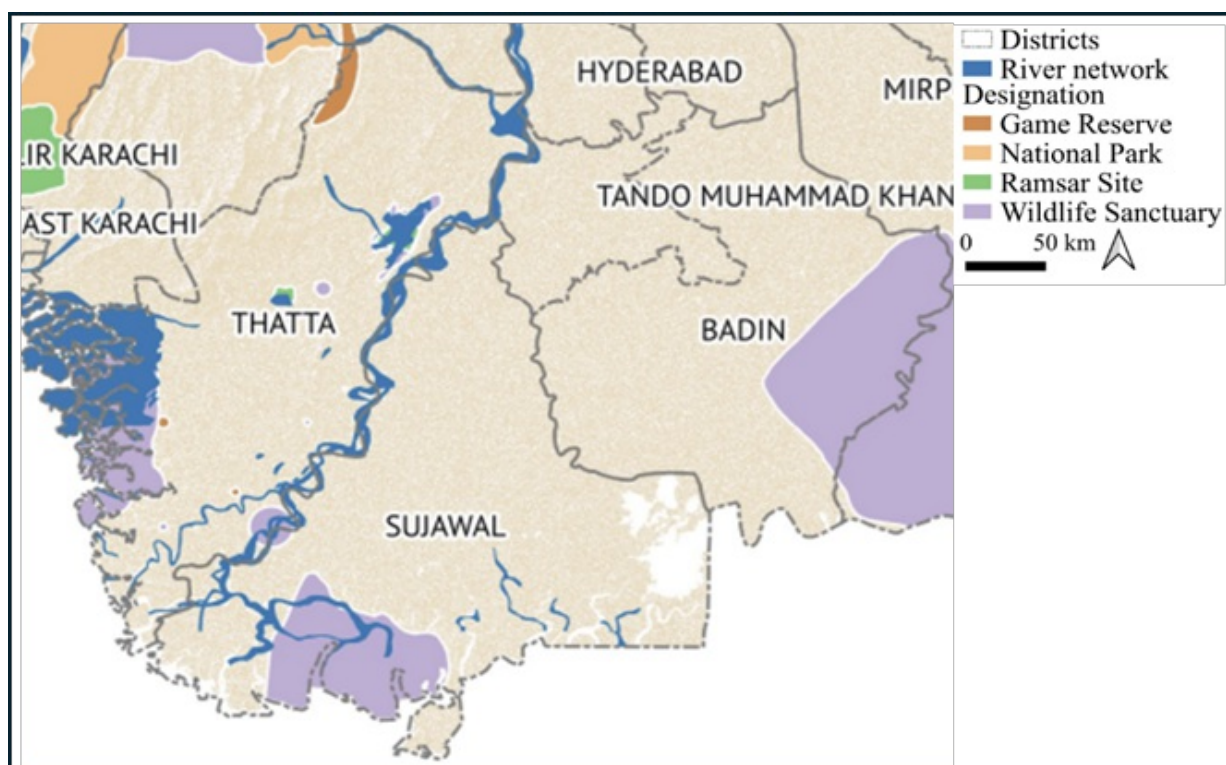


Figure 1 Protected areas in Sindh, Pakistan (2017) – FAO - <https://www.fao.org/3/cc4323en/cc4323en.pdf>

Land use and agriculture

44. **Irrigated agriculture** is practiced in 28.5 percent of the province thanks to the availability of a vast irrigation network. Main crops of Sindh are wheat, rice, sugarcane and cotton. There are two main cropping seasons in the country, 'Kharif' (April-June), suitable for summer crops cultivation (e.g. rice, sugarcane, cotton, maize, pulses), and 'Rabi' (October-December) when wheat, lentils, tobacco, rapeseed, barley and mustard are grown. Other cropland uses are orchards on 0.9 percent, crop on marginal and saline land is 10.6 percent, river flood plain cropping on 2.8 percent, rainfed is 2.5 percent and forest cover 0.8 percent of land. The total area of non-irrigated cropland consisting of river floodplain and rain-fed areas is 5.3 percent. The northern part of the province has a high ratio of cultivated land, while the southern part (corresponding to the targeted zone) has a low ratio. Cultivated land, however, includes pastureland and fallow land, which are non-irrigated areas^[3]. A study titled as The Land Cover Atlas of Pakistan - The Sindh Province (2014) by FAO, SUPARCO and Crop Reporting Service of Sindh gives detailed land cover figures under different uses in the province. Table 2 provides the relevant information about Sindh province and the target districts Badin and Thatta (Sujawal has been considered as part of Thatta). In Badin, about 69 percent of the area is irrigated and cropped, 13 percent area is saline and about 7 percent area is wet. While Thatta shows a totally different picture where only 20 percent area is irrigated and about 40 percent area is wet. There are six sugar mills and 30 rice husking mills in the district but remains one of the poorest districts of Sindh.

Table 2. Detailed land cover data of Sindh province and Badin and Thatta (including Sujawal) districts.

Land use/cover	Sindh		Badin		Thatta	
	Area km ²	Percent	Area km ²	Percent	Area km ²	Percent
Orchards	1,249.77	0.9	15.74	0.2	30.69	0.2
Crop Irrigated	40,206.23	28.5	4,587.36	68.9	3,377.83	19.6
Crop Marginal and Irrigated Saline	14,962.74	10.6	881.89	13.2	634.88	3.7
Crop in Flood Plain	3,988.94	2.8	0	0	474.45	2.7

Crop rainfed	3,477.11	2.5	0	0	375.60	2.2
Forest - Natural Trees and Mangroves	1,154.83	0.8	11.66	0.2	934.51	5.4
Natural Vegetation in Wet Areas	3,169.11	2.2	0.04	0	752.87	4.4
Rangelands - Natural Shrubs and Herbs	6,466.09	4.6	168.87	2.5	1,052.20	6.1
Built-up	3,318.66	2.4	137.8	2.1	120.76	0.7
Bare area	8,687.30	6.2	353.94	5.3	1,779.38	10.3
Bare Areas with Sparse Natural Vegetation	42,922.42	30.4	42.84	0.6	1,018.55	5.9
Wet area	11,482.40	8.1	456.00	6.9	6,720.96	38.9
Total	141,085.60		6656.14		17,272.68	

Source: Sindh Poverty Reduction Strategy 2018

45. **High value crops—Horticulture and Vegetables.** Sindh produces fruits and vegetables in large quantities including mango, banana, dates, onion and red chillies. Much of the production of these higher value crops is concentrated in well-defined clusters -vegetables and milk in the peri-urban areas of Karachi and Hyderabad, dates in Khairpur, Red Chillies in Umerkot, bananas in various clusters, Onion in Tando Allahyar, Jamshoro, Sanghar and Matiari districts. Average yields are very low and harvest-post harvest losses are high - over 35 percent for almost all fruits and vegetables. Improved quality, improved storage, packing, handling and transport and processing would also improve returns and reduce prices and price fluctuations.
46. Sindh has a large **livestock** population and livestock production accounts for over half of agriculture GDP. There are 18.1 million cattle and buffaloes which are mainly kept for milk. Most rural households, including the landless, keep a buffalo, a cow or goat. These are mostly managed by women. Milk from these animals is a critical source of food, and in particular of protein. For many families, it is also their main asset, which can be sold in times of urgent cash requirements. There is also a rapidly expanding peri-urban population of cattle, mainly concentrated in cattle colonies near the big cities, to supply urban consumers. Important by-products from cattle are meat, from mature adults and young males, and hides. There are also almost 21 million sheep and goats, many of which are around Badin and Thatta where they are grazed on arid and semi-arid land^[4].
47. Sindh has been blessed with a coastal belt of about 350 km providing access to the **natural fisheries resources** of the Arabian sea. Shrimp, crab, oyster and other fish are commonly found and captured along the coast. About 300,000 hectare area is also available in the Indus deltaic area for aquaculture development. The Sindh Province holds a premier position in the Fisheries Sector of the country. It commands 100 percent of brackish, 65 percent of Fresh water and 71 percent of Marine water resources of the total Fisheries resources of Pakistan. These resources have about 400 commercially important varieties of marine products, 200 varieties of fish and 13 varieties of shrimp.
48. This huge potential in agricultural production is progressively decreasing and ecosystems are critically affected. Indeed, the heavy withdrawals upstream for agriculture and inappropriate water management lead to sea intrusion into productive agriculture lands, salinity and waterlogging.

Water and water management: a major issue for the Indus River Delta

49. Indus River management: Indus River is the major source of water for irrigation in Pakistan (95 percent) and has many other uses throughout the year in most cases. Sindh uses its share of Indus water agreed upon among the provinces, under the Water Apportionment Accord of 1991. The original annual flow of the Indus, in the Delta, is estimated at 180 billion cubic meters (150 MAF - million acre feet). Due to intense uses all along its watershed (dams, reservoirs, and irrigation), the current flow observed in the Delta varies from 0,3 to 91 MAF, being most of the time far below 10 MAF and the 27 MAF recommended by IUCN^[5]. As a result, the Delta of Indus does not receive enough freshwater, leading to seawater intrusion into surface and groundwater resources, accelerating coastal erosion and reducing sediment deposits.
50. Sea intrusion has eroded 72 out of 698 villages of Thatta and Badin districts while unabated fishing during the breeding period is resulting in catch depletion and adversely affecting the livelihoods of many households depending on fishing. Trawling is becoming common for catching large volumes of fish, which is not only threatening the livelihoods of small poor fishermen but will also deplete the resource. Marine and terrestrial biodiversity are affected (in particular mangrove forests), coastal lakes are at risk (some have disappeared), some groundwater resources cannot be used for irrigation or drinking water supplies.

Consequently, livelihoods depending on fishery and agriculture are disrupted and extreme weather events have a greater impact. In addition, the reduction in sedimentary alluvium also impacts soil fertility. Aquaculture development on marine and brackish water needs to be promoted to reduce pressure on sea resources through cage, pens and pond culture techniques.

51. Groundwater estimates for Sindh vary but water quality is mostly not fit for drinking and irrigation. The estimated groundwater resources vary between 13 million acre feet (MAF) to 16.2 MAF with a safe yield ranging between 4.4 MAF to 8.1 MAF. Lashari and Mahesar estimated groundwater availability as 5 MAF^[6]. Groundwater is mostly saline, waterlogged areas are around 50 percent and 70 percent before and after the monsoon season, respectively, and a significant portion of groundwater recharge (70-80 percent) is lost as non-beneficial evaporation^[7]. According to a 2002 report, more than half (57 percent) of the area, with a water table less than three (03) meters, is affected by waterlogging, which has further increased since then. Good quality groundwater is present along the left bank of the Indus River in a strip. Some other areas also have some fresh groundwater pockets. Reliable and accurate estimates of groundwater use in the province are not available. Data provided by FAO¹⁷ show a gradual increase in the number of tube-wells. The same report indicated around 53,862 tube-wells in the province (public: 12,038 and private: 41,824 or higher as estimated by unofficial sources) (Azad et al., 2003). Sindh Irrigation Department identified 3933 freshwater tube-wells and 2255 saline water tube-wells. During 2009-2010 to 2015-2016 installation of private tube-wells (153 to 178) became more popular than public tube-wells (5 to none) (Pakistan Bureau of Statistics, 2017a). The main purpose of many public tube-wells was to drain saline water^[8].

[1] Article in Britannica. <https://www.britannica.com/place/Sindh-province-Pakistan>

[2] Sindh water resources management—issues and options. FAO investment centre, occasional paper series, (15). Azad, A., Rasheed, A., and Memon, Y., 2003. <http://www.fao.org/3/af105e/af105e00.pdf>

[3] Data Collection Survey on Agricultural Sector in Sindh Province in the Islamic Republic of Pakistan; JICA 2022

[4] These elevations are derived from satellite-based SRTM Digital Elevation Model (courtesy to Mr. Rao Zahid Khalil)

[5] Indus River Delta: Contested Narratives in the Climate of Change, Hammed Jamali (<https://www.sciencedirect.com/science/article/pii/S1568484923000333>)

[6] Potentials for improving water and agriculture productivity in Sindh, Pakistan. Sixteenth International Water Technology Conference, IWTC 16 2012, Istanbul, Turkey

[7] Key challenges and opportunities for conjunctive management of surface and groundwater in mega-irrigation systems: Lower Indus, Pakistan. van Steenberg, F., Basharat, M. and Lashari, B., 2015. Resources, 4(4), pp.831-856

[8] Article in Britannica. <https://www.britannica.com/place/Sindh-province-Pakistan>

b. Climate trends and impacts

52. The climate of Sindh is hot and arid, with varied seasonal temperatures (max mean) of 27.08 °C in winter to 43.32 °C in dry summer and average annual rainfall of 128.80 mm/yr^[1] falling mainly during July and August (Sindh lies between the two monsoons the southwest monsoon from the Indian Ocean and the northeast or retreating monsoon, deflected towards it by the [Himalayan mountains](#) and escapes the influence of both). The region's scarcity of rainfall is compensated by the inundation of the Indus twice a year, caused by the spring and summer melting of Himalayan snow and by rainfall in the monsoon season upstream in the basin. These natural patterns have recently changed somewhat with the construction of dams and barrages on the Indus River. Average humidity is 45 percent. It is quite dry in April and quite humid in August with 69 percent humidity^[2].

Climate change

53. There has been 0.6 to 1.0°C rise in average temperatures between 1951 and 2000 in the arid coastal areas of Pakistan^[3]. An analysis of the changes in minimum and maximum temperature and rainfall in Sindh coastal area^[4] has shown that yearly mean maximum temperature fluctuated between 32.3 to 35.1°C, while that of minimum mean temperature ranged between 18.8 to 20.8°C which revealed that mean minimum temperature was towards higher side. The number of annual hot days has increased by 10 days in Karachi^[5].
54. The average rainfall has also reduced. The Climate Risk Profile of Pakistan (World Bank and ADB, 2021^[6]) mentions that mean rainfall in the arid plains of Pakistan and the coastal belt has decreased by 10 percent%–15 percent% since 1960. An increase in the incidence of drought conditions is likely.
55. These trends are confirmed by a recent study^[7] which analyzed 57 years (1961-2017) time series climate data of Thatta,

Sujawal and Badin districts and showed rising trends in temperature. This study has concluded that the margin between the mean annual maximum and minimum temperature continues to get narrower. The 48 years (1961 to 2008) data analysis has also shown that precipitation seemed to be declining across these districts. Relative humidity and wind speed have decreased in Thatta and Sujawal while both are increased in Badin during 48 years.

56. Extreme events are also more common. Parts of southeastern Sindh received rainfall of up to 36 in (910 mm) and some cities have received very heavy rainfall on occasion. In 2005, Hyderabad received 14.4 in (370 mm) in just 11 hours^[8]. The Sindh Hazard and Risk Atlas 2022 shows that the three districts of Thatta, Sujawal and Badain are more subjected to cyclone and storm surge. Recent history of district Badin shows that it has remained in the grip of disasters in one form or another. Cyclone, heavy rains, droughts and floods have followed each other with short intervals^[9].
57. Only considering the precipitation data of Sindh over the decades, the vulnerability of the province to floods cannot be depicted. The problems of floods in Sindh are mostly connected to the downstream flow of water through the Indus river. Therefore, the focus should be directed towards the local conditions as well as the changing precipitation patterns of the Upper Indus Basin. The heavy downpour of KP inundating the Indus Delta in 2010 and 2011 resulted in heavy flooding in Sindh accentuated by local rainfall. The example of 2022 floods also testifies to this situation when local prolonged and continuous rains wreaked havoc in Sindh destroying properties, crops and infrastructure.

Impact of Climate Change

58. The impacts due to higher temperature and trend for lower precipitation start to be clearly observed with snowball effect due to important water withdrawal in the upper part of the Indus. The saltwater intrusion into the Indus delta has increased, resulting in increased soil salinity, deterioration of mangrove cover, and loss of marine fisheries. Vegetation species diversity has been reduced considerably due to climate change patterns but also an increasing salinity; currently, in the most degraded soil, the vegetation is dominated by salt tolerant shrubs like the family of Chenopodiaceae and Tamericeae. The mangrove is struggling to grow despite major restoration programmes since the 2000s.
59. Due to heavy reliance of marginalized communities, particularly in rural areas, on natural resources, climate change impacts can significantly reduce their assets, trapping them into a never-ending cycle of poverty.
60. Unfavorable climatic conditions are also already impacting livelihoods and health. The frequency and intensity of extreme climate events is projected to increase, increasing disaster risk particularly for vulnerable poor and minority groups^[10]. A heatwave in 2015 left morgues and hospitals overwhelmed and killed at least 1,200 mostly elderly, sick, and homeless people. Droughts and water scarcity diminish dietary diversity and reduce overall food consumption, and this may lead to malnutrition.
61. Due to the flat topography of the province, flood water stagnate for several months with severe negative impacts on crops, livestock and human health as was observed during 2011 and 2022 floods. In 2022, according to the World Bank, as vast areas flooded, **casualties rose to 799**, and 4.4 million acres of agricultural land were destroyed. With collapsing infrastructure, the agriculture-reliant Sindh struggled to cope. An increase in the number of people affected by flooding is projected, with a likely increase of around 5 million people exposed to extreme river floods by 2035–2044, and a potential increase of around 1 million annually exposed to coastal flooding by 2070–2100^[11]. This is likely to result in an increase in the number of people exposed to diarrheal and other infectious diseases, thus lowering their capacity to utilize food effectively.
62. In Pakistan, climate hazards, women's exposure to climate hazards affecting food systems, and gender inequalities intersect and impact women's vulnerability to climate change in a significant way. With large concentrations of women participating in the agricultural labor force, and with high levels of gender inequalities, the result is high risk and exposure and low adaptive capacity of women to the effects of climate change^[12]. Indeed, in Sindh, women are considerably involved in the sowing, weeding and harvesting of rice, vegetables, cereals, legumes and oilseed crops while their involvement in livestock, perennials and mixed farming is relatively low as cattles are mostly grazing which is usually done by men.
63. However, for the Government of Sindh, change also creates opportunities and agriculture in Sindh needs to adapt and take advantage of the altered agroclimatic conditions^[13]. Higher rainfall, even if it is more erratic, could enhance overall water supplies if adequate on-farm or other local storage facilities are created; in arid areas, migrant herders can be quick to expand or contract their grazing herds. Also, flood waters could enhance soil quality if sufficient drainage facilities are available to prevent water stagnating.

Climate change adaptation

64. The disasters- floods, drought, cyclones and sometimes heatwaves hit the area off and on and the affected people are either evacuated by the government or they leave the affected areas themselves but no formal arrangements have been made to protect them in future. These people return to their places after the threat is over to resume their routine life. Any relief activities by the government or NGOs are only temporary by providing water, meals, maybe some medicines and tents. At the same time, the relief activities by the government or the private sector are not integrated to be more effective and long lasting. This type of response is reactive in nature and results in high costs both for the government in provision of temporary relief and people in the shape of lost livelihoods and incomes. Pooling up the resources available to improve the climate resilience of the vulnerable areas and communities will be a more cost-effective, sustainable and appropriate measure to deal with climate change vulnerabilities.
65. In a couple of cases, some affected people were shifted to Karachi but most of them returned as no arrangements for their employment or livelihoods were put in place there. Mitigation measures in some areas like protection bunds or mangroves plantation have been carried out but these are too small to protect the people. So far, little has been done on the adaptation aspect of climate change impacts. Soft activities like training have been carried out but no concrete steps have been taken by

the government nor the communities have adapted the measures they have learned during the training.

66. Smallholder farmers and target groups display a moderate awareness of climate risks and related adaptive and mitigation measures. Project efforts to build the adaptive capacities of its beneficiaries must emphasize the need for disaster risk planning, climate resilient cropping, and reduced post-harvest losses, among other interventions that build the beneficiary's capacity to cope with, or recover from, the effects of climatic shock events.
67. The project components are designed to encourage livelihood diversification, and climate adaptation considerations in order to face the problems in the context of climate change. Building the capacity of vulnerable target groups to diversify activities through investments in new/alternate means of income generation including off-farm enterprises, skill development for employment and business development, value chain development and participation, productive asset ownership etc. together with provision of climate resilient support infrastructure and awareness are key interventions of the project. The vulnerable groups (women, the poor, and young people) will become more resilient to hazards associated with climate change as a result of increased incomes and capacity and training components included in various programs.

[1] Sindh Hazard and Risk Atlas 2022 (<https://pdma.gos.pk/hazard-risk-atlases/>)

[2] Article. <https://www.worlddata.info/asia/pakistan/climate-sindh.php>

[3] Climate Change Profile of Pakistan, ADB 2017 (<https://www.adb.org/sites/default/files/publication/357876/climate-change-profile-pakistan.pdf>)

[4] Appraisal of Climate Change Impacts on the Coastal Areas of Sindh Using Remote Sensing Techniques. A. Alamgir, et al. American-Eurasian J. Agric. & Environ. Sci., 15 (6): 1102-1112, 2015

[5] Sindh Climate Change Policy 2022.

[6] Climate risk country profile. The World Bank ADB. 2021

https://climateknowledgeportal.worldbank.org/sites/default/files/2021-05/15078-WB_Pakistan%20Country%20Profile-WEB.pdf

[7] Variation in Climatological Regimes in Coastal Rural Districts of Sindh, Pakistan. S.U. Fatima et al (2021), INT. J. BIOL. BIOTECH., 18 (3):485-497, 2021.

[8] Ibid.

[9] Badin district profile, Social Welfare Department, Government of Sindh.

[10] Climate Change Profile of Pakistan, ADB 2017 (<https://www.adb.org/publications/climate-change-profile-pakistan>)

[11] Climate Risk Country Profile: Pakistan, ABD 2021 (<https://www.adb.org/publications/climate-risk-country-profile-pakistan>)

[12] Koo, Jawoo, et al. "Effectively targeting climate investments: A methodology for mapping climate-agriculture-gender inequality hotspots." (2022) <https://cgspace.cgiar.org/server/api/core/bitstreams/5c1e74cc-93e9-4f16-b459-864bad60257c/content>

[13] Sindh Agriculture Policy (2018-2030) - <https://faolex.fao.org/docs/pdf/pak191432.pdf>

c. Climate change mitigation

68. Sindh and the Indus River Delta is seen as an important contributor to the Nationally Determined Contribution (NDC 2021^[1]). In particular, blue carbon ecosystems have been proposed as Nature-based Solutions to mitigate climate change. Blue carbon refers to "carbon stored in coastal and marine ecosystems" and rely mainly on mangroves, tidal marshes and seagrass beds. Indeed, the Delta Blue Carbon Project, launched by GoS in 2015, a 60-year project, will eventually protect and reforest 350,000 ha of mangroves, as well as maintain biodiversity and improve the economic lives of local communities in the Indus Delta region, in the districts of Thatta and Sujawal. The reforestation is being carried out jointly with local communities, and is expected to eventually create 21,000 full-time jobs ranging from protecting existing mangrove forests to propagule collection, nursery maintenance, planting, community and infrastructure development, and survey and data collection work.^[2]
69. SCRCP through the ADB funded project, with mangrove and inland forest restoration, contributes to this aim. The IFAD funded part of SRCP, focusing on livelihood resilience, won't contribute to the reduction of GHG emissions. Built on a strong Component 1 seeking to enhance current food value chains, and small livestock (at household level) the project may slightly contribute to marginal GHG emissions. But on another hand, mitigation co-benefits could be achieved with the reduction of the use of chemicals (favoring compost, legume crops, crop residue integration, agroforestry, manure use and soil quality improvement).

[1] [Pakistan Updated Nationally Determined Contributions.pdf \(unfccc.int\)](#)

[2] [Restoring mangroves to augment carbon sinks in the Indus Delta 2021_cas-detude_utcatf_sindh_eng.pdf \(climate-chance.org\)](#)

2.3 Target group profiles

70. The project targets rural poor communities in the three districts whose livelihood is affected by the deterioration of their agricultural ecosystems and climate change hazards. Their vulnerability jeopardizes their food security and limits their social and economic inclusion, in particular for young people and women.
71. SCRP target groups will be selected in village communities and take into account the following criteria. Few previous project interventions: Many communities have received project support seeking poverty alleviation and agriculture development for example with the support of organizations such as NRSP (National Rural Support Programme) or SRSO (Sindh Rural Support Organization) and the setting up of Communities Organizations. SCRP will give priority to communities which have not benefited from these programs to date. ADB interventions will focus on grey and green infrastructures, with the aim of restoring ecosystems and ecosystem services: improved drainage systems, mangrove reforestation and inland forest restoration. To the possible extent, for enhanced impact, IFAD will target the livelihood of the communities impacted by ADB supported infrastructures. The aim is to make the most of new services and improved context for income generation and food security.
72. More precisely, within these communities, the project activities will focus on the poor households, smallholder farmers and fisherfolks. The criteria will include poverty ranking of taluks and Union Councils based on NSER poverty ranking, agriculture and/or fisheries development potential, prevalence of smallholder farming and fishing. Component 1 is primarily focused on smallholder farmers, tenants, sharecroppers and fishermen already involved in agriculture and crop production and fisheries. Their value chains will be strengthened for increased incomes including investments in socio-economic and value chain support infrastructure. Access to affordable credit will be facilitated to eliminate their reliance on exploitative informal credit sources. Component 2 is aimed at improving livelihoods of rest of the village households that are landless and poor. The Benazir Income Support Programme (BISP) beneficiary households will be assisted either with productive assets for increased incomes or youth, both men and women, from these households will be assisted to acquire market demanded skills for employment or self-enterprise development. This segment will also be linked to subsidized credit for scaling up their enterprises. Under Villages Organizations, beneficiaries will be organized into interest groups based on commonality of activities, with light but robust and self-determined governance mechanisms.
73. Project planning and implementation approach will be participatory, community centered and driven, and inclusive covering smallholder farmers and fisherfolk, tenants and sharecroppers, and landless wage workers. Women headed households, young men and women will be particularly targeted and engaged. At least 40 percent beneficiaries will be women and 30 percent youth.

Conclusion of the analysis of the Environmental, Climate and Social situation

74. Economic dependence of the large majority of the population on landowners, middlemen, and for youth and women on men, is a well-established situation that blocks the socio-economic distribution of power, assets (land, inputs and financial services) and income, leading to lasting poverty and the subservience of a majority to a minority.
75. The ecosystem degradation of the Delta Indus River, due to water cycle disruption, salinization and pollution is the result of an intensive use of land for agriculture and limited regulations leading to spillover effects (sea intrusion, coastal degradation, poor quality soil).
76. Climate change affected the territory with longer high temperature waves, drought, erratic rains and floods, in addition to more frequent cyclones.
77. These unfortunate realities (Economic dependence, Ecosystem degradation, Climate change) have a snowball effect on the rural poor leading to interlinked consequences (1) low agricultural productivity, (2) high vulnerability to shocks and, (3) malnutrition.
78. To strengthen rural resilience and fight rural poverty, SCRP should address at the same time, the three root causes and the three consequences, maximizing the interrelations and the opportunities for integration of the mainstreaming themes (Youth, Gender Equity and Women Empowerment, Nutrition, Climate and Environment) through a system approach together with the ADB supported components (ecosystems restoration).

3. Institutional analysis

79. A number of institutions, policies, legal acts, programmes exist at the national and provincial level for the protection of the environment, youth development and poverty reduction. A brief is given below of some of the important institutions and acts relevant to the project from a safeguard and IFAD mainstreaming perspective.
80. Sindh Environmental Protection Act, 2014. The Act provides for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution, and promotion of sustainable development. In addition, it establishes composition, duties and responsibilities of the Sindh Environmental Protection Council, entitled to: coordinate and supervise the enforcement of all the provisions relating to the environment in the Province; approve comprehensive provincial environmental and sustainable development policies and ensure their implementation within the framework of a conservation strategy and sustainable development plan; approve the Sindh Environmental Quality Standards; provide guidelines for the protection and conservation of species, habitats, and biodiversity and for the conservation of renewable and non-renewable resources; integrate principles and concerns of sustainable development into socio-economic and development policies, plans and programmes at the provincial, district and local levels; deal with inter-provincial and federal-provincial issues; provide guidelines for biosafety and for the use of genetically modified organisms; etc.

81. In addition, it creates the Sindh Environmental Protection Agency entitled to administer and implement the provisions of this Act and the rules and regulations regarding the environmental issues. The Act specifies that no person shall discharge waste, pollutant, emit noise or any other matter that may cause or likely to cause pollution or adverse environmental effects (as defined in section 2) in levels higher than specified in Sindh Environmental Quality Standards. No person shall import hazardous waste into Sindh province or its coastal, internal, territorial or historical waters, except prior approval of the Agency. Part VI deals with Environmental Examinations and Assessments and specifies that all provincial authorities, local councils and local authorities responsible for formulating policies, legislation, plans and programmes to be implemented in Sindh province which may cause any environmental impact in the jurisdiction of the province shall forward to the Sindh Environmental Protection Agency a strategic environment assessment.
82. Sindh Poverty Reduction Strategy (2018) is aimed at facilitating local economic development that generates income-generating opportunities for the poor in rural and urban areas, facilitating improved access to physical assets, education, vocational skills training, primary health care, improved nutrition and social services, through improved consolidation and cost effectiveness of service delivery. The Community Driven Local Development approach promoted has been carried out with the support of public organizations such as NRSP (National Rural Support Programme) and SRSO (Sindh Rural Support Organization), customary to support Community Organizations and their networks. Programmes and projects such as the National Poverty Graduation Program and GRASP (Growth for Rural Advancement and Sustainable Progress- in Sindh and Balochistan) must be taken into account.
83. **Sindh Youth Policy.** The Province of Sindh had its Youth Policy approved in 2018. The policy aims to empower young people across economic, social, and political spheres. It identifies key challenges faced by youth and proposes effective institutional mechanisms. It lays out a comprehensive action plan spanning short, mid, and long-term strategies, but its targets and resource allocation were only established for the first five years (2018-2023). The primary focus of efforts to enhance the economic empowerment of youth revolved around bolstering education, cultivating new skill sets, offering vocational training, and extending support and financing for businesses led by young entrepreneurs.
84. The Sindh Technical Education & Vocational Training Authority (STEVTA) looks like a promising partner to analyze the market demand for new services and ensure skills development.
85. A **National Gender Policy Framework 2022** has been launched and inputs sought from the provincial governments.
- Sindh adopted a **Gender Equality and Women's Empowerment Policy (2020-2030)**. The vision of this policy is that women and girls are equal citizens and participants in decision-making from the home to the national and international levels, are able to lead a life free from violence, discrimination, exploitation, neglect and abuse, and enjoy the full range of their social, political and economic rights. While the main objectives are safeguarding gender equality and the rights of women and girls, mainstreaming gender and investing in projects for removing barriers to gender equality and women's empowerment.
 - **Sindh Commission on Status of Women, Strategic Plan 2022-24** has been implemented with a vision where women enjoy gender equality, live with dignity, are empowered, and protected, and contribute as equal citizens to development in an environment free from all forms of violence and discrimination. Important objectives set for the Commission are to examine policies for women's development and gender equality and to review laws, rules and regulations affecting the status of women.
86. Furthermore, a project funded by JICA, supporting women economic empowerment has been recently ended in Sindh: (Livelihoods and Well-being of Female Home Based Workers in the Informal Economic Sector in Sindh Province - LIGHT-F Project^[1]). Implemented with the Women Development Department of GoS, it has developed a set of tools to enable women to acquire professional behaviors for working and generating generation, and to use more financial services. Some of those tools, developed for rural context, could be considered under component 2 of the SCRP.
87. **Sindh Domestic Violence Prevention and Protection Act 2013.** The domestic violence prevention and protection act, 2013 is legislation for preventing and addressing domestic violence within the jurisdiction of the province of Sindh. This act provides measures to prevent and legal protection to women, children and aggrieved person from domestic violence; also it holds accountability of perpetrators committing any act of domestic violence.
88. **Sindh Home Based Workers Bill, 2018** protects the rights of home-based workers and ensure equal treatment to them and their dependents in case of sickness, maternity leave, injury or death. The government will establish a council for registering these workers and to look after their remuneration, contract or other rewards. Every registered home-based worker will be entitled to all those social, medical and maternity benefits, compensation, marriages and deaths grants envisaged in all labour laws. Under this law, an arbitration committee will also be formed for the settlement of disputes between workers and employers.
89. **Sindh Women's Agricultural Workers Act 2019.** This Act is enacted to provide for the recognition of women's work in agriculture (including farming, livestock and fisheries) and related sectors, to promote and protect their rights, to ensure their participation in decision-making and to foster empowerment through work, and to improve the health and nutrition of women agricultural workers and their children. A woman agricultural worker shall receive pay equal to pay received by male workers for the same work. A woman agricultural worker having a child of up to two years of age may breastfeed her child in safe and hygienic conditions and in the first six months of the child's life shall receive the necessary support to exclusively breastfeed her child. The Act makes provisions for: working hours and off-work; maternity leave; access to public health services and government institutions of agriculture; etc.
90. A **Multi-sectoral Nutrition Strategy** has been adopted for 2018-2025. Through the BISP, **WFP** provides nutrition and health support to pregnant women and mothers of young babies in Sindh. This programme must be considered, to take advantage of nutrition awareness provided to mothers and move forward for actions leading to better food security for households.

91. **Sindh Drinking Water Policy 2017.** The goal of the policy is to improve the quality of life of people of Sindh by reducing morbidity and mortality caused by water-borne diseases through provision of safely managed and potable drinking water to the entire population that is located on premises, available when needed, and free from contamination, affordable and of sufficient quantity, and in a way that is efficient, equitable and sustainable. Major objective is to create an enabling framework for safely managed drinking water supply, regulation of water usage, extraction, treatment, transportation and distribution.
92. Sindh adopted an **Agricultural Policy for 2018-2030**^[2]. The Policy also seeks to reduce rural poverty to half of current levels, along with food insecurity and malnutrition. Efforts will be made to increase the agricultural sector growth to 4-5 percent per annum, which is a necessary condition to raising incomes and reducing poverty and food insecurity; providing decent employment, particularly to the large numbers of youth entering the labour market. Higher overall growth and increased productivity will be the main engines for reducing poverty and malnutrition in rural areas. One of the major objectives of the Policy is: Make efficient and sustainable use of natural resources and minimize negative environmental impacts, make all efforts to preserve the agro-ecological resource base. The key natural resources for agriculture in Sindh are its soil and water and to conserve these, Government will promote better on-farm water management; regulate and control groundwater resources, coastal areas, and rangelands; enhance effective controls on pollutants, including fertilizer, pesticides and effluents; and promote agroforestry and improvement of grazing areas. SCRPs fully meet these objectives. In addition, Climate change impacts affect agriculture and actions to adopt more resilient practices are needed (see below). **Irrigation Department** is also involved in flood control, protection, and drainage.
93. **Climate Change Ministry and Environmental Protection Agency:** Pakistan's per capita emissions are one of the lowest in the world. However, Pakistan remains in the top 10 countries that have been significantly vulnerable to extreme climate events during the last two and half decades. The Climate Change Ministry has been established in April 2012 and is headed by a federal minister.
94. The nationally **Determined Contributions have been updated in 2021.** Among various principles, GoP highlights the potential of Nature Based Solutions for climate mitigation, climate adaptation and livelihood opportunities. GoP intend also to improve cross-referencing to climate change in national and provincial policies and action plans on climate adaptation and mitigation. In agriculture, smart inputs and management practices in agriculture and livestock management are promoted (improved irrigation practices and water management; climate resilient agriculture/ agroforestry practices; introduction of climate resilient seed varieties; promotion, storage and management of green manure). In addition, in particular for Sindh, the blue carbon ecosystems are seen as untapped carbon sink amid other Nature Based Solutions. This blue carbon is mainly composed of mangroves, tidal marshes and seagrass beds highly that characterize the project area.
95. The Federal Cabinet approved a **National Adaptation Plan** in July 2023 to fashion an effective response to increasing frequency of climate change induced disasters. NAP is a framework for implementing large-scale environmental adaptation, building climate resilience, promoting inclusivity, facilitating collaboration among different stakeholders, and serving as an effective tool for climate finance mobilization. The plan outlines ten priority areas including addressing increasing water scarcity, protecting natural endowments, urban resilience, human capital development and disaster risk management.
96. At provincial, GoS has adopted its **Climate Change Strategy** in 2022 a reference framework for the various interventions in the areas of climate change in Sindh, including agriculture, livestock, fisheries and water resources both for adaptation and mitigation.
97. The **Wildlife and Protected Areas Act 2010.** The Act provides legal cover to the policies of the government to meet the local, provincial, national and global requirements for protection, preservation, conservation, management and sustainable use of biodiversity, especially wildlife and their habitats in the Province as a key component of biological diversity with due recognition to social, cultural, economic, biological and ecological significance for the present and future generations; and to provide for and to support participation of local communities by creating enabling environment, raising awareness, building capacities and providing economic incentives for promotion of their social, economic, cultural and ecological well-being including poverty reduction. However, the natural ecosystems of Sindh are severely affected by the lack of freshwater in the Indus River, the various pollution from industries and agriculture (pesticide, overgrazing), logging for wood fuel, raising important negative impacts on wildlife.
98. At the provincial level, GoS adopted the Climate Change Policy in 2022. The goal of the policy is to ensure that climate action is mainstreamed in the development planning and especially in the economically and socially vulnerable sectors of the economy; and to steer Sindh province towards green growth and climate compatible development. Some of the important objectives include:
- Formulate a province specific policy presenting the full picture of the climate change situation in the province, its affects and provide for a robust set of solutions and implementation plans to mitigate the effects, keeping in view the National Climate Change Policy (October 2021) and Twelfth Five Year Plan (2018-23) of the Federal government that combines inclusive growth with green development.
 - Ensure interests of vulnerable groups and that gender aspects are adequately addressed in climate development strategies and planning.
 - Develop basis to provide for the required human, financial and play technological resources and inter and intra coordination mechanisms and frameworks which are required to further the policy objectives and undertake necessary actions, in a clear, timely manner to mitigate the adverse effects of climate change.
 - Enhance awareness of the impacts of climate change among all stakeholders for necessary appropriate measures to combat and minimize these impacts.
99. In addition, under GCF funds, FAO is implementing the project Transforming the Indus Basin with Climate Resilient Agriculture and Water Management (TIBCRAW). In addition to (1) effective and improved government capacity to manage water resources

and information for climate-resilient agriculture sector and society at large, the project aims at (2) developing farmers' capacity to practice climate resilient agriculture and improve water management and (3) building an conducive enabling environment where farmers can continually receive support from both the public and private sectors to sustain behavioural changes. Training material, supported public and private services, could be usefully identified for the implementation of SCRP, in particular under component 1.

100. **Sindh Provincial Disaster Management Authority** (PDMA) deals with natural or man-made disasters in the province and is mandated to engage in activities concerning all four stages of Disaster Management Spectrum.

101. **Environment Protection Agency, Sindh**. The Sindh government has established the Environmental Protection Agency (EPA) in 1989 and is housed in the Environment, Climate Change & Coastal Development Department that was established in 2016. Regional Offices have been established at Karachi, Hyderabad, Mirpurkhan, Larkana and Sukkur.

[1][Project for Improvement of Livelihoods and Well-being of Female Home Based Workers in the Informal Economic Sector in Sindh Province \(LIGHT-F Project\)](https://light-f.jimdofree.com/): <https://light-f.jimdofree.com/>

[2] Sindh Agriculture Policy (2018-2030) - <https://faolex.fao.org/docs/pdf/pak191432.pdf>

4. Environmental and social category

102. The project is classified as 'moderate for environmental and social risks.
103. Protected areas of the three districts are well documented (see paragraph 43 above). Project activities will be avoided in these areas, as well as off protected coastal zones. In addition to the ADB supported components of SCRP aim at restoring ecosystem services with green and grey infrastructures (forest restoration and drainage system). The project plans include the construction of ponds for water storage and aquaculture purposes. Ecosystems in these areas are already highly degraded, however, prior assessment and clear specification will guide the work of suppliers to prevent additional damage, thus consequence are deemed minor.
104. Support to farmer and fisherfolk communities will promote sustainable and climate resilient practices. Not environmentally sustainable production if living natural resources are not expected. Support for livestock and aquaculture will remain size-limited, allowing 3 to 5 small ruminants per family and aquaculture ponds or coastal sea farms of less than half an acre. Manure and wastewater will be recovered for agricultural use.
105. The project will promote the use of natural pesticides and reduce the use of chemicals (fertilizers and pesticides) only if unavoidable. Among other, the project will support (i) a participatory assessment of practices to promote sustainable and accepted practices and raise awareness on alternatives (ii) training on compost, biocontrol, crop rotation, biopesticide, and other climate-smart practices encouraging farmers to reduce their dependency on input suppliers and use chemical only when needed.
106. In the three districts of the project, the only cultural heritage listed is the Historical Monuments at Makli concentrated around Thatta city (necropolis from the 14th to 18th century). No project activity will be carried out in or near this sub-urban area, therefore no direct nor indirect impacts are anticipated.
107. As in all rural areas, children regularly participate in the work of the family farm. Information raising toward parents will be provided to remind the central role and priority of scholarship.
108. Project suppliers are not expected to employ young people under the age of 18. The project will identify any activities that will need to exclude children to ensure their safety.
109. As in all rural areas, farmers of Sindh may be exposed to extreme weather and other OHS risks related to agricultural activities. Farmers and fisherfolks will be trained and made aware of these risks and how to mitigate them.
110. Influx of traffic is anticipated as minor and limited to the activities in relation to secondary road rehabilitation in isolated coastal communities. Adequate mitigation measures, including reinforced signaling to enhance safety will be assessed and implemented in these cases.
111. When the project can contribute to improved land agreement between landowners and sharecroppers/tenants, PMU will provide assistance to develop clear and appropriate agreement benefiting from the lessons learn of the FAO project "Improved Land Tenancy in Sindh Province" (<https://www.fao.org/documents/card/en?details=cc2179en>). Local committees will be put in place to prevent grievance between landowners and sharecroppers/tenants (see the Grievance Redress Mechanism).
112. Throughout project implementation, specific measures to prevent and address risks related to gender-based violence (GBV) will be adopted. At a minimum, these should include the establishment of "confidential channels for reporting incidents and providing support" as well as appropriate grievance redress mechanisms. Furthermore, the PMU will ensure that contractors and suppliers include clear provisions regarding non-discrimination and prevention of sexual harassment and sexual abuse.
113. The Project will support access to formal credit services for beneficiaries' production/income generation activities under two streams. Stream 1 to support provision of interest free subsidized loans to project beneficiaries, and Stream 2 through a partial credit guarantee instrument to cover the credit risk of the partner banks. This will be provided to lending financial institutions on a reducing basis over the Project period. Financial intermediaries will be selected during early implementation under a competitive process and specifications will include criteria related to the existence of a robust Environmental and Social Management System in line with SECAP requirements.

5. Climate risk category

114. As per the SECAP screening tool, the climate risk category of the project is determined as “substantial” based on the following analysis:
115. Hazard identification: Project areas covered by SCRP activities are experiencing flooding, cyclones, sea intrusion, droughts (less pronounced but the climate is already semi-arid in Sindh) and heat waves. The risk, vulnerability, intensity of these hazards on the concerned communities and ecosystems should be assessed with proper mitigation measures at the implementation stage.
116. Exposure Assessments: Poor and vulnerable rural populations will access program interventions in agricultural systems, livelihoods, and infrastructure. Given that crop production and fisheries are dependent on weather patterns and climatic events and the relatively low adaptive capacities of target populations, the climate risk is deemed substantial.
117. Sensitivity: Income earned from agricultural, livestock and fishing activities form the core livelihoods of the target groups covered by the project. Again, because revenues earned from crop production and other agricultural activities highly correlate with weather patterns and climatic events, beneficiaries covered by the project are climate sensitive. While the project expects to build the resilience of target populations to withstand the adversities of climate and other economic shocks, at baseline, low adaptive capacities characterize these populations.
118. Smallholder farmers and target groups display a moderate awareness of climate risks and related adaptive and mitigation measures. Project efforts to build the adaptive capacities of its beneficiaries must emphasize the need for disaster risk planning, climate resilient cropping, and reduced post-harvest losses, among other interventions that build the beneficiary’s capacity to cope with, or recover from, the effects of climatic shock events.
119. Project outcomes may be adversely impacted by climate change and without the provision of effective adaptation measures, beneficiaries may face financial challenges, while the ecosystem and biodiversity may face degradation. Effective risk management and building adaptive capacities of households, infrastructure, communities, and ecosystems are imperative for the success of the project.

6. Recommendations for project design and implementation

120. Biodiversity and the environment in the three districts are severely affected by the agricultural sector, in particular due to major water withdrawals upstream from the Indus River Delta. The ADB-linked project will contribute to restore ecosystem services and improve the water cycle. SCRP will not implement any activities within protected areas and PMU will regularly update the official list of protected areas. Assessments of direct and indirect impacts to biodiversity, ecosystems and services will be carried out in particular for activities under component 1 (interest group development plan and infrastructure). Farmers and fisherfolks will be assisted to adopt climate resilient and eco-friendly practices. Irrigation schemes will remain limited in size (less than 300 ha). The Sindh Irrigation Department will be involved to ensure sustainable investment and appropriate water management system. SCRP’s implementation will include construction of ponds, limited in size (less than ½ acres) for water storage and aquaculture, in areas where ecosystems are already affected by the disruption of flows in the Indus River (sterile soils due to salinity, disappeared coastal lakes and wetland). Integrated water resources management principle will be observed by PMU, associated with water saving analyses. Ponds for water storage, coastal ponds for aquaculture, as well as shellfish farms, net pens, and cages for offshore aquaculture, must initially be presented to the Sindh Environmental Protection Agency (SEPA) to determine the necessity for prior Environmental Impact Assessments (EIA) and Initial Environmental Examinations (IEE). Suppliers of pond and sea farm systems must adhere to the specific guidelines derived from these assessments to prevent harm to ecosystems.
121. Under the Value Chain Business Plans (Component 1), the project will support farmers/fisherfolks in adopting sustainable practices, promoting climate smart agriculture, ecofriendly fishery and aquaculture. Soil fertility and pest control will be systematically considered, analyzing current practices with farmers, before strengthening capacities with sustainable practices from Climate-smart agriculture (such as compost and biopesticides and crop rotation). Where the VC plan leads to the use of agrochemicals (as a last resort), and technical support for pest control is formalized in a pest and fertilizer management plan (please refer to the ESCMP note and its dedicated annex). Aquaculture ponds filled during flooding season and/or using brackish water with adapted species. Waste water from aquaculture will be used for agricultural purpose. Under the VC plan for marine aquaculture, environmentally friendly solutions will be promoted wherever possible such as Recirculating Aquaculture Systems (RAS), which utilize closed-loop systems to treat and reuse water, minimize environmental impact and allow for improved control over growing conditions; and Integrated Multi-Trophic Aquaculture (IMTA), which combining the farming of different species that have complementary roles in the ecosystem to improve sustainability and reduce waste. Some skill and asset acquisition for job market and/or self-enterprise under Component 2 will support these transitions to sustainable value chain (production of compost, biopesticides, biochar).
122. As most of the rural area worldwide, child labour may exist in Sindh agricultural sector. Under the Village mobilization of component 1, parents will be sensitized to avoid child labour and prioritize first child scholarship and education. When working on the family farm outside school hours, children shouldn’t be exposed to dangerous tasks and their mobilization should be geared towards the acquisition of skills.
123. The working conditions of farmers and their families are difficult in Sindh and may be exposed to OHS as present in the agriculture sector. Farmers are regularly exposed to extreme temperatures in this semiarid territory, and the use of pesticides is widespread. The project is anticipated to mitigate these risks on workers, providing recommendations for good agricultural practices. The use of Personal Protective Equipment will be encouraged, as well as livestock prophylaxis and Veterinary

services (C2). When constructed, ponds will be protected to prevent drowning.

124. Specific measures to prevent and address risks related to gender-based violence (GBV) will be adopted. At a minimum, these should include the establishment of “confidential channels for reporting incidents and providing support” as well as appropriate grievance redress mechanisms. With established reporting protocols in place, any incidents of GBV occurring in the context of the project can be immediately addressed through confidential reporting and documentation. The PMU will ensure that contractors and suppliers include clear provisions regarding non-discrimination and prevention of sexual harassment and sexual abuse.
125. To ensure the project meets the needs of local communities and builds on their strengths, consultation and participation of local stakeholders are necessary in project preparation, implementation, monitoring and reporting. Stakeholder engagement shall be free of intimidation or coercion, gender and youth inclusive and responsive, tailored to the needs of disadvantaged and vulnerable groups. Timely disclosure of relevant and adequate information, preferably in Sindhi, will be provided to stakeholders and made readily accessible. Documentation of stakeholder engagement processes will form part of project report submissions. Action plans (ESCMP, SEP, GRM) have been prepared, to incorporate stakeholder feedback. The documents will be included as materials for periodic monitoring. A website dedicated to project implementation will be made and all information and action plans shall similarly be uploaded to the project website.
126. A Project grievance mechanism is drafted (see the Stakeholder Engagement Plan) and will require disclosure and feedback from stakeholders prior to implementation. IFAD has an established complaints procedure for its supported projects to receive and facilitate resolution of concerns and grievances as regards alleged non-compliance of its environmental and social policies and the mandatory aspects of SECAP. If despite an official project GRM, stakeholders still need their concerns to be resolved in a fair and timely manner through an independent process, IFAD may be contacted by e-mail at SECAPcomplaints@ifad.org.
127. PMU will include an Environmental and Climate Change Specialist who will be in charge of implementing and monitoring the Environmental, Climate and Social Management Plan under the project. Once villages and value chains are selected, the Specialist will check and assess the environmental and social specific context, consider the planned activities of the value chain plans, and develop subproject Management Plan accordingly. The ESCMP Matrix included in this SECAP review note offers guidance on this matter. Regular monitoring of activities with physical visits and feedback from district offices should be carried out with proper record and report to be summarized in the project progress reports including compliance status, challenges and issues.

7. Further studies needed

128. An Environmental, Social and Climate Management Plan (ESCMP), a Stakeholder engagement Plan (SEP) and a Targeted Adaptation Assessment have been conducted by Project Design Report and annexed to the present SECAP review note and Project Implementation Manual.
129. The management plan needs to be updated once village and value chains have been selected. Environmental and Social Impact Assessments for the irrigation schemes, water ponds, inland and offshore aquaculture systems, feeder roads for fisherfolk, landing sites and other infrastructures, will have to be carried out depending on their size, in accordance with the recommendations of the Sindh Environment Protection Agency (SEPA).

8. Monitoring and evaluation

130. Monitoring of SECAP performance assessment will be conducted by PMU on a semi-annual basis. Results of monitoring shall be disclosed to stakeholders and their feedback recorded and acted upon.
131. Materials to be prepared and assessed are:
- Records of community participation during project planning and implementation phases, including issues raised by target groups, how addressed, use of local languages where appropriate.
 - Proof of environmental permit compliance on relevant activities.
 - Reports on environmental and social management and monitoring activities.
 - Reports on the monitoring and evaluation of private sector participation.
 - Records of grievances received and the management process to completion, along with analysis of the grievance trends.
 - Occurrence of climate extremes and associated disaster/risk measures.
 - Disaggregated records on the participation of women and young people in all activities (ie. training/capacity building, consultations, and others).

9. References

- Sindh District Profiles 2021, Planning and Development Department, Government of Sindh;
- State of Poverty in Pakistan, Pakistan Institute of Development Economics (PIDE) Report 2021
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- Fishery and aquaculture country profile.
- Data Collection Survey on Agricultural Sector in Sindh Province in the Islamic Republic of Pakistan; JICA 2022.
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- Updated Nationally Determined Contributions, Pakistan, 2021.
- Sindh Climate Change Policy 2022
- Sindh Hazard and Risk Atlas 2022.
- Sindh water resources management, issues and options. FAO Pakistan
- Indus River Delta: Contested Narratives in the Climate of Change, Hammed Jamali. Indus River Delta: Contested Narratives in the Climate of Change - ScienceDirect
- National Gender Policy Framework. Ministry of Planning, Government of Pakistan
- Sindh Gender Equality & Women's Empowerment Policy 2019-2020
- Unpaid Work and Pakistani Women, October 2023
- Pakistan National Nutrition Survey 2018, MOH Pakistan

ESCMP Matrix

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
1. Biodiversity						

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	<p>1.1 Ensure complementarity with the ADB-supported component of SCRP aiming at restoring ecosystem services and strengthening climate-resilience of local communities.</p> <p>1.2 Update the list of protected areas in the three districts of the project.</p> <p>1.3 Avoid all project activities in protected areas.</p> <p>1.4 For activities near protected areas (buffer zone), conduct an assessment of direct/indirect impacts on the protected areas, in line with existing management plans and ensure adequate stakeholder engagement with relevant authorities/management bodies.</p> <p>1.5 Conduct assessments of direct and indirect impacts to biodiversity, ecosystems and services where the project will be implemented (Villages level) to identify the need for mitigation measures, applying the precautionary principle and following the mitigation hierarchy.</p> <p>1.6 For activities with implications for biodiversity that cannot be avoided, identify mitigation measures in line with the Provincial Guidelines as per the Provincial Protection Act of 2014 and the requirements of Standard 1 of SECAP.</p> <p>1.7 Consult with local stakeholders on the outcomes of the assessments in the context of the activities of the SEP (stakeholder Engagement Plan).</p> <p>1.8 Ensure inclusion of relevant provisions for contractors of infrastructures based on the results of the assessments (1.4 and 1.5).</p>	<ul style="list-style-type: none"> · Sindh Environment Protection Agency (SEPA) · Meetings with Village Organizations, rural support organizations and sub-groups for all three Districts in the context of the Stakeholder Engagement Plan (SEP) activities. 	PMU	<ul style="list-style-type: none"> · Sub-project screenings and assessments · Semi-annual Monitoring Reports · Land use map and GIS activities screening 	Annual	In-house

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Threat to or loss of biodiversity, natural resources, ecosystems and ecosystem services	<p>1.9 Control the environmental and ecosystems skill of Implementation Partners (specification in the tenders, field visit), provide training courses and invite IPs to assess their own work performance and impact.</p>	<ul style="list-style-type: none"> · IPs 	PMU	<ul style="list-style-type: none"> · Activity/ accomplishment reports · Annual Reports 	Initial and annual	In-house
	<p>1.10 As part as local mobilization, Communities will be trained on ecosystem services, ecosystem maintenance and how agriculture can benefit from ecosystem and impact ecosystems, in particular where the ADB-supported infrastructure will be implemented.</p> <p>1.11 Awareness raising on incidental take of wildlife</p>	<ul style="list-style-type: none"> · Meetings with sub-groups and VOs and other stakeholders as relevant · Agriculture Department and farmers · Fisheries Department and Fisherfolk. 		<ul style="list-style-type: none"> · Activity/ accomplishment reports · Monitoring reports · Annual Reports 		
	<p>1.12 Communities will be consulted and sensitized on the need to conserve biodiversity and engaged in all such efforts.</p>	<ul style="list-style-type: none"> · Meetings with sub-groups and VOs and other stakeholders as relevant 		<ul style="list-style-type: none"> · Progress reports on stakeholder engagement activities 		
					Bi-annual	

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible PM Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Integrated in the project's budget Cost Estimate (\$)
	<p><i>1.13 Mainstream ecosystem-friendly activities into Value Chain plans (C1) and Income generation for young people (C2)</i></p> <p><i>Including training on efficient use of resources, climate-smart agriculture and aquaculture and principles in relation to pest management and soil fertility, in line with relevant activities in each project site.</i></p>	<ul style="list-style-type: none"> · Key informant interviews · Meetings with sub-groups, VOs and NGOs. 		<ul style="list-style-type: none"> · Activity/ accomplishment reports 		
	<p><i>1.14 Calls for tenders for ponds will set clear guidelines to avoid damaging mangrove and wetland</i></p>	<ul style="list-style-type: none"> · Tender specifications for contractors 		<ul style="list-style-type: none"> · Call for tenders 	Each tender for ponds	
	<p><i>1.15 Under Component 2 and 3, innovation to adapt to saline environment will be promoted</i></p>					
2. Resource Efficiency and Pollution Prevention						

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Unsustainable use/production of natural resources	<p>2.1 Procure natural-resource commodities certified under appropriate certification and verification systems</p> <p>2.2 Extraction of construction aggregates only from approved quarry sites</p> <p>2.3 Limit to suppliers that can demonstrate that they are not contributing to significant conversion or degradation of natural or critical habitats</p> <p>2.4 Application of integrated water resources management principles for all promoted activities</p> <p>2.5 Promote water saving approaches and improving water use efficiencies where relevant</p>	<ul style="list-style-type: none"> · SEP · Tender specifications (using ecolabel and environmental product declaration) · Agr. Extension · Input interest groups, VOs including smallholders 	PIU, Local Government Units	<ul style="list-style-type: none"> · Annual Reports · Activity Reports · Call for tenders 	Quarterly	Lodged with Contractor
	<p>2.6 Provide training or capacity-building on proper selection, distribution, storage, application, and disposal of pesticides (including biopesticides) and fertilizers (including compost) _ see the specific annex on agrochemical in the ESMCP note_. Where agrochemicals are necessary as part of the VC plan, an integrated pest and fertilization management plan is prepared following this annex.</p>	<ul style="list-style-type: none"> · VC interest groups, including landowners · Agricultural Extension service 	PMU	<ul style="list-style-type: none"> · Activity Reports · Management Plan 	Bi-annual	Integrated in the project's budget C1
	<p>2.7 Provide adequate training to agro-dealers on the specifications and quality control of agro-chemicals</p>	<ul style="list-style-type: none"> · Fertilizers and agro-chemical dealers. · Agr. Extension Department 	PIU	<ul style="list-style-type: none"> · Activity reports 	Bi-Annual	

Environmental/ Social and Pollution of ecosystems and climate impacts Water bodies, biodiversity losses due to inappropriate use of agri-chemicals (fertilizers and pesticides)	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Re sp on sibl e In s t i t u t i o n i n I m p l e m e n t a t i o n P h a s e	Means of Verification (Monitoring and reporting)	F r e q u e n c y o f V e r i f i c a t i o n	Cost Estimate (\$)
	2.8 Awareness raising activities about the advantages and opportunities provided by agroecology and climate-smart agriculture to landowners for efficient water use, quality seeds and best agronomical practices	· Agr. Extension, Social Mobilization Partners (SMP) Input Interest Groups and land owners	PMU and SMP	· Activity and progress reports	Bi-annual	
	2.9 Conduct activities to manage soil salinity: · Test soil for electrical conductance (EC) to determine the extent of the problem at sub-project/site level · Identify salt-tolerant crops and fodder · Reduce excess water to control excess salt movement · Ensure use irrigation water and drainage systems to wash salts down the soil profile. Develop site-specific management plans	· Agr. Extension, VOs, landowners	PMU and SMP	· progress reports	Bi-annual	
	2.10 Explore the implementation of agriculture/aquaculture combined systems	· Agr. Extension, Fisheries Department, Fisherfolk and VOs.	PMU and SMP	· progress reports	Bi-annual	
	2.11 Development of a comprehensive and accurate baseline information on fish stocks + predicting potential impacts of fisheries operations, and evaluating the significance of these impacts	· Sindh Livestock and fishery · SEP · PMU/PIU ADB	PMU	· Annual reports · Activities reports	Annual	Lodged in C3

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
risk of overfishing and fishing related pollutions	2.12 Develop fishery management plans for optimum sustained yields at concerned VO level.	<ul style="list-style-type: none"> · Fisheries Department · VOs 	PMU and SMP	<ul style="list-style-type: none"> · progress reports 	Bi-annual	
	2.13 <i>Training</i> on fish grading and processing of fish-waste for fish feed in aquaculture production	<ul style="list-style-type: none"> · Fisheries Department · VOs 	PMU and SMP	<ul style="list-style-type: none"> · progress reports 	Bi-annual	
	2.14 <i>Training</i> and awareness raising of fishers and vessel operators (on damage due to fishing equipment and practices)	<ul style="list-style-type: none"> · Fisheries Department · VOs · Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> · progress reports 	Bi-annual	
	2.15 <i>Promotion</i> of selective fishing gear and improved fishing gear technology	<ul style="list-style-type: none"> · Fisheries Department · Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> · progress reports 	Bi-annual	
	2.16 <i>Provision</i> of oil disposal sites	<ul style="list-style-type: none"> · Fisheries Department · VOs · Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> · progress reports 	Bi-annual	

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	2.17 Promoting energy-efficient stoves for fish smoking and other equipment for fish drying	<ul style="list-style-type: none"> · Fisheries Department · VOs · Fishers 	PMU and SMP	<ul style="list-style-type: none"> · progress reports 	Bi-annual	
	2.18 Mobilizing fisherfolks organizations/cooperatives and/or <i>promoting</i> their creation	<ul style="list-style-type: none"> · Fisheries Department · Concerned VOs 	PMU and SMP	<ul style="list-style-type: none"> · progress reports 	Bi-annual	
	2.19 Improvement of the Fish Value Chain (landing sites, <i>climate</i> -smart cold chains, access roads to landing sites) with the development of ecolabel	<ul style="list-style-type: none"> · Fisheries Department · Sindh Coastal Development Department. · Fisherfolk 		<ul style="list-style-type: none"> · progress reports 		
Pollution of waterbodies due to fishing nets and equipment	2.20 <i>Conduct</i> training on pollution reduction in fishing practices and promotion of natural materials for fishing <i>nets</i>	SEP	PMU	<ul style="list-style-type: none"> · Activity Reports · Annual reports 	annual	Integrated in the project's budget

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Development of aquaculture production with related risks	<p>2.21 Consult SEPA to ensure compliance with the necessary Environmental Impact Assessments (EIAs) or Initial Environmental Examinations (IEEs) for both inland and offshore aquaculture systems.</p> <p>2.22 Siting fishponds and drawing up development plans that <i>ensure</i> equitable distribution of land and water resources among different users</p> <p>2.23 <i>Adopting</i> climate-proof fish farming facilities</p> <p>2.24 Ensure adequate pond water exchange and flushing <i>systems</i> and dilution or treatment of pond water prior to release and promote and test integrated agriculture/aquaculture systems</p> <p>2.25 Where possible use Integrated Multi-Trophic Aquaculture (IMTA) and Recirculating Aquaculture Systems (RAS) for offshore aquaculture.</p> <p>2.26 Ensure careful application of feeds, fertilizers and other <i>inputs</i> based on recommended standards to avoid excess usage and water pollution.</p> <p>2.27 <i>Regularly</i> monitor water quality in ponds and the wider environment to ensure that it meets required standards for the safe production of fish and aquaculture products. Special attention must be paid to excessive use of antibiotics.</p> <p>2.28 <i>Advocating</i> for eco-labelling fish farming products</p> <p>2.29 Ensure adequate training and support to fish farmers, especially to former fisherfolks</p> <p>2.30 <i>Collection</i> of the generated waste</p>	<ul style="list-style-type: none"> · Villages authorities and local communities · Sindh Livestock and fishery Department and its extension service · SCMs · Private sector in fishery industry 	PMU	<ul style="list-style-type: none"> · Annual reports · Activities reports 	Annual	Lodged in C1

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Extraction, diversion or contaminated water	<p>2.31 <i>Recycling</i> and storing drainage water</p> <p>2.32 <i>Promote limited</i> irrigation system schemes</p> <p>2.33 Promoting water-saving approaches and improving water-use efficiencies in all sectors (incl. laser leveling technologies and soil-water conservation measures)</p> <p>2.34 Applying technical resource-efficiency measures such as <i>reverse-osmosis-based</i> water recovery</p> <p>2.35 Application of integrated water resources management <i>principles</i>. Promoting the preservation of water quality (integrated pest management and integrated soil fertility management to minimize the use of agrochemicals; proper treatment of wastewater before it is discarded)</p> <p>2.36 Training on the importance of ecosystem services and <i>natural</i> water cycle, including the adequate ecological flows</p> <p>2.37 <i>Abbrev.</i> Impact assessment studies in case of rehabilitation/new irrigation scheme (in consultation with SEPA)</p>	<ul style="list-style-type: none"> · Sindh Irrigation Department · Sindh Livestock and fishery Department · PMU/PIU ADB · VOs, farmers and aquaculturists 	PMU	· Activities reports	Bi-annual	
3. Cultural Heritage – Not Applicable						
4. Indigenous Peoples – Not Applicable						
5. Labor and Working Conditions						

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Working conditions that do not meet national labor laws or international commitments (e.g. discriminatory practices)	5.1 Raising awareness about child farm labour at farm level as part of the social mobilization 5.2 Identify hazardous/dangerous practices where children participation in family farming will be restricted (such as aquaculture and risk of drowning)	<ul style="list-style-type: none"> SEP, FGDs, KII, IPs 	PMU	<ul style="list-style-type: none"> SECAP Monitoring Reports Activity Reports Accomplishment reports Annual reports 	Bi-annual	Integrated into project
OHS risks	5.3 Apply the precautionary principle and mitigation hierarchy related to working conditions 5.4 Monitor all management and mitigation measures put in place by contractors/third-party workers 5.5 Raising awareness about farm labour under heat waves and other extreme water conditions (session to organize during Climate Smart Agriculture training) 5.6 Raising awareness about the safety risk related to chemicals such as pesticides, promote alternative approach for crop protection (crop rotation, biopesticides) and, if needed, support acquisition of appropriate equipment for chemical application (see. 2.6 above) 5.7 Inform landowners about forced work and abusive requests to sharecroppers	<ul style="list-style-type: none"> VOs Extension services local IPs farmers & fisherfolks 	PMU CDU	<ul style="list-style-type: none"> Monitoring Reports Activity Reports 	Bi-annual	Integrated into project
6. Community Health, Safety and Security						

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Risk of increase in vector-borne (ie malaria), water-borne (ie hepatitis) and other communicable diseases (i.e. Covid, AIDS)	<p>6.1 Identify closest medical services</p> <p>6.2 Promote hygiene and health practices in relation to project activities (in particular when livestock and drinking water provision)</p>	<ul style="list-style-type: none"> SCM, KII 	PMU	<ul style="list-style-type: none"> SECAP, Annual reports, RHU advisories Accomplishment reports 	Bi-annual	In-house

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Potential increase of gender-based violence, including sexual harassment, exploitation and abuse in project areas	<p>6.3 Adopt a “Do No Harm” approach and develop a gender strategy that will include specific actions to mitigate risks of Gender-Based Violence due to project initiatives in line with the Government of Sindh Sexual Violence Response Framework 2020-2024 and the Sindh Commission On The Status Of Women 2022-2024 Strategic Plan</p> <p>6.4 Sensitize project beneficiaries of the grievance redress mechanism</p> <p>6.5 Ensure gender balance among project staff, especially those involved in service delivery</p> <p>6.6 Adapt facilities set-up and services delivery to ensure they are accessible, safe and convenient for women and girls, taking into consideration their age, disability status, and residency status</p> <p>6.7 Conduct regular consultations with women and girls, paying attention to groups who may be particularly vulnerable. This may require organizing women-only groups of focus group discussions, with female facilitators or staff, to ensure women have the possibility to flag their concerns and interests as freely as possible</p> <p>6.8 Create an enabling environment for women’s participation through the social mobilization process and appropriate and purposeful communication (for example, targeting religious and traditional leaders and influential community members to ensure there is buy-in on women’s participation in the project’s activities and potential risks of tension and conflict within households and communities are mitigated</p> <p>6.9 Map the existence of adequate services for survivors/affected persons</p> <p>6.10 Ensure that contractors and suppliers include clear provisions regarding non-discrimination and prevention of sexual harassment and sexual abuse</p>	KII	PMU	<ul style="list-style-type: none"> · SECAP · Activity reports 	Annual	In-house

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Increase or alteration of traffic in project and neighboring areas.	6.11 Road safety assessment 6.12 Appropriate signaling 6.13 Contractors to establish traffic management system during construction 6.14 Establish GRM 6.15 Coordinate with ADB	<ul style="list-style-type: none"> · SCM, KII, ADB PMU 	PMU	<ul style="list-style-type: none"> · Road Safety Assessment · Consultation Documentation · Annual reports 	annual	Lodged with Contractor
7. Resettlement						
Conflicts due to change in land-tenure arrangements	7.1 Stakeholder engagement (including sensitization of landowners) 7.2 Local committees established to address issues	<ul style="list-style-type: none"> · VOs · Landowners · IPs 	PMU, CDU			
8. Financial intermediaries						
Financial intermediaries do not implement E&S safeguards to adequately support investments	8.1 Ensure financial intermediaries prepare and implement adequate ESMS in line with SECAP policies prior to onlending activities	<ul style="list-style-type: none"> · Meetings · Trainings · Tender specification · Due diligence before contractualization 	PMU	<ul style="list-style-type: none"> · Activity Reports · Management Plan · Monitoring reports · ESCMP of the selected financial institution 	Bi-annual	
9. Others						

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Lack of active participation from vulnerable groups	9.1 During inception, review the SEP and GRM to update stakeholder matrix, engagement activities and GRM to ensure the establishment and maintenance of accessible and culturally and socially appropriate consultations	Workshops and meetings	PMU	<ul style="list-style-type: none"> · IEC Reports · GRM Reports · IEC materials · Meeting reports · Accomplishment reports / annual Reports 	Bi-annual	
	9.2 Induction sessions with local communities and documentation of how the feedback received informed project activities	SCMs, meetings, FFS		<ul style="list-style-type: none"> · Minutes and progress reports on SEP with a specific session on feedback from stakeholders and how it informed was integrated in the project. 	Bi-annual	
	9.3 Validate activities with local communities to ensure relevance and adequacy to local customs and conditions					

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
<p>Footnotes</p> <p>Within the text.</p>	9.4 Ensuring all stakeholder engagements include representation from the youth	Stakeholder Engagement Meetings	PMU	Meeting minutes and attendance sheet with distinction of youth/women/other categories attending events.		

Environmental and Social Safeguards Classification: Moderate

Environmental and Social Safeguards				
Biodiversity conservation	Yes/No	Likelihood	Consequence	Risk Rating
1.1 Could the project potentially involve or lead to conversion or degradation of biodiversity, habitats (including modified habitat, natural habitat and critical natural habitat) and/or ecosystems and ecosystem services?	No			Low
1.2 Could the project involve or potentially lead to activities involving habitats that are legally protected, officially proposed for protection, or recognized as protected by traditional local communities and/or authoritative sources (e.g. National Park, Nature Conservancy, Indigenous Community Conserved Area, ICCA, etc.)?	No			Low
1.3 Could the project potentially involve or lead to an increase in the chance of human-wildlife encounters/conflict?	No			Low
1.4 Could the project potentially involve or lead to risks to endangered species (e.g. reduction, encroachment on habitat)?	No			Low
1.5 Could the project potentially involve or lead to impacts/risks to migratory wildlife?	No			Low
1.6 Could the project potentially involve or lead to introduction or utilization of any invasive alien species of flora and fauna, whether accidental or intentional?	No			Low
1.7 Could the project involve or lead to the handling or utilization of genetically modified organisms?	No			Low
1.8 Could the project involve or lead to procurement through primary suppliers of natural resource materials?	Yes	Possible	Minor Project may possibly require procurement of natural resources through primary suppliers, and resource extraction is tightly regulated. Alternatives to procurement of natural resources through primary suppliers exists.	Moderate
Resource Efficiency and Pollution Prevention	Yes/No	Likelihood	Consequence	Risk Rating
2.1 Could the project involve or lead to the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No			Low
2.2 Could the project involve or lead to primary not environmentally sustainable production of living natural resources? (Note: this includes the cultivation or rearing of plants or animals, including annual and perennial crop farming, animal husbandry (including livestock), aquaculture, plantation forestry, etc)	No			Low
2.3 Could the project involve or lead to engagement in areas of forestry, including the harvesting of natural forests, plantation development, and/or reforestation?	No			Low
2.4 Could the project involve or lead to significant consumption of raw materials, energy, and/or water?	No			Low

Environmental and Social Safeguards				
2.5 Could the project involve or lead to significant extraction, diversion or containment of surface or ground water (e.g. construction of dams, reservoirs, river basin developments, groundwater extraction)?	No			Low
2.6 Could the project involve inputs of fertilizers and other modifying agents?	Yes	Likely	Minor The project only requires minimal amounts of fertilizer	Moderate
2.7 Could the project involve or lead to procurement, supply and/or result in the use of pesticides on crops, livestock, aquaculture or forestry?	Yes	Likely	Minor The project only requires minimal amounts of pesticide.	Moderate
2.8 Could the project be located in an area which is being, or has been, polluted by an external source (e.g. a mine, smelter, industry)?	No			Low
2.9 Could the project involve livestock – extensive and intensive systems and animal products (dairy, skins, meat, etc.)?	No			Low
Cultural Heritage	Yes/No	Likelihood	Consequence	Risk Rating
3.1 Could the project be located in areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage?	Yes	Highly unlikely	Negligible The project is not located in an area that is considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage	Low
3.2 Could the project directly or indirectly affect indigenous peoples' rights, lands, natural resources, territories, livelihoods, knowledge, social fabric, traditions, governance systems, and culture or heritage (tangible and intangible)?	No			Low
3.3 Could the project involve or lead to significant excavations, demolitions, movement of earth, flooding or other environmental changes?	No			Low
3.4 Could the project involve or lead to adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No			Low
3.5 Could the project involve or lead to alterations to landscapes and natural features with cultural significance?	No			Low
3.6 Could the project involve or lead to utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No			Low
indigenous peoples	Yes/No	Likelihood	Consequence	Risk Rating

Environmental and Social Safeguards				
4.1 Could the project be sited in areas where indigenous peoples are present (including the project area of influence)?	No			Low
4.2 Could the project result in activities located on lands and territories claimed by indigenous peoples?	No			Low
4.3 Could the project result in impacts on the rights of indigenous peoples or to the lands, territories and resources claimed by them?	No			Low
4.4 Could the project result in the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No			Low
4.5 Could the project lead to impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No			Low
Labour and Working Conditions	Yes/No	Likelihood	Consequence	Risk Rating
5.1 Could the project operate in sectors or value chains that are characterized by working conditions that do not meet national labour laws or international commitments? (Note: this may include discriminatory practices, high gender inequality and the lack of equal opportunities, denial of freedom of association and collective bargaining, labour migrants)	No			Low
5.2 Could the project use or operate in a value chain where there have been reports of forced labour? (Note: Risks of forced labour may be increased for projects located in remote places or where the status of migrant workers is uncertain)	No			Low
5.3 Could the project involve children (a) below the nationally-defined minimum employment age (usually 15 years old) or (b) above the nationally-defined minimum employment age but below the age of 18 in supported activities or in value chains?	No			Low
5.4 Could the project: (a) operate in a sector, area or value chain where producers and other agricultural workers are typically exposed to significant occupational and safety risks, and/or (b) promote or use technologies or practices that pose occupational safety and health (OSH) risks for farmers, other rural workers or rural populations in general? (Note: OSH risks in agriculture might include: dangerous machinery and tools; hazardous chemicals; toxic or allergenic agents; carcinogenic substances or agents; parasitic diseases; transmissible animal diseases; confined spaces; ergonomic hazards; extreme temperatures; and contact with dangerous and poisonous animals, reptiles and insects. Psychosocial hazards might include violence and harassment.)	Yes	Possible	Moderate The project operates in a sector, area, or value chain where workers are occasionally exposed to significant OSH risks, and where regulation is known to be weak or non-existent.	Moderate
Community Health, Safety and Security	Yes/No	Likelihood	Consequence	Risk Rating
6.1 Could the project be at risk from water-borne or other vector-borne diseases (e.g. temporary breeding habitats), and/or communicable and non-communicable diseases?	No			Low
6.2 Could the project lead to unintended negative impacts on nutrition?	No			Low
6.3 Is there a possibility of harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	No			Low
6.4 Could the project involve or lead to the construction or rehabilitation of dams?	No			Low
6.5 Could the project involve or lead to transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No			Low
6.6 Could the project lead to adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	No			Low

Environmental and Social Safeguards				
6.7 Could the project lead to the potential for gender-based violence, including sexual harassment, exploitation and abuse, as a result of labour influx, land redistribution, or other actions that alter community dynamics?	Yes	Unlikely	Minor Minor changes to community dynamics. Resulting serious recorded cases of gender-based violence and/or sexual exploitation. Gender-based violence protocols in place.	Low
6.8 Could the project lead to increases in traffic or alteration in traffic flow?	Yes	Likely	Negligible The project will not lead to an increase in traffic, or alteration of traffic flow.	Moderate
6.9 Could the project lead to an influx of project workers?	No			Low
6.10 Could the project involve or lead to the engagement of security personnel to protect facilities and property or to support project activities?	No			Low
Physical and economic resettlement	Yes/No	Likelihood	Consequence	Risk Rating
7.1 Could the project result in temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No			Low
7.2 Could the project result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No			Low
7.3 Could the project present a risk of forced evictions?	No			Low
7.4 Could the project result in impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	Yes	Possible	Minor The project will result in minor impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights. Legal recourse and other forms of arbitration/conflict resolution are available.	Moderate
Financial intermediaries and direct investments	Yes/No	Likelihood	Consequence	Risk Rating

Environmental and Social Safeguards				
8.1 Could the investment be granted to an institution that does not have an environmental and social policies and an associated environmental and social management system (ESMS) in place (transparent, publicly available)?	Yes	Possible	Minor The institution has an ESMS in place. Reports are not publicly available.	Moderate
8.2 Could the investment be granted to an institution with insufficient capacities (i.e. unqualified personnel e.g. ES Officer) to implement the ESMS?	Yes	Possible	Minor The institution employs an ES Officer, and employs field staff to implement the ESMS.	Moderate
8.3 Could the investment be granted to an institution that does not have an Exclusion List?	Yes	Possible	Minor The institution has an Exclusion List, but cannot verify the	Moderate
8.4 According to the institution's portfolio classification: Could the institution have potential high-risk projects in their portfolio?	Yes	Possible	Minor The institution has a portfolio classification available and an insignificant portion of funds are invested in high-risk projects.	Moderate
8.5 Is there evidence that the institution does not comply with the local legal framework?	Yes	Possible	Minor	Moderate
8.6 Does the institution provide a stable communication channel with stakeholders and local communities (e.g. a Grievance Redress Mechanism)?	Yes	Possible	Minor Communities and stakeholders can contact the institution and a process is in place for institutionalizing the communication channels (e.g. complaint-management system) and training staff accordingly.	Moderate

Environmental and Social Safeguards

8.7 Does the organization provide auxiliary or capacity building support services.	Yes	Possible	Minor The institution offers basic training services to customers (directly or thrid party service providers to improve business and livelihood opportunities.	Moderate
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Climate Risk Classification: Substantial

Step 1: Hazard identification	
What are the expected hazards in the project intervention area?	No, Yes, TBD
River flood	Yes
Costal Flood	Yes
Urban Flood	No
Landslide	No
Cyclone	Yes
Water Scarcity (agricultural droughts and/or dry spells)	Yes
Extreme Heat	Yes
Wildfires	No
Future climate scenarios foreseen (period 2040-2059) - Change in frequency and intensity	No, Yes, TBD
Change in temperature (increase or decrease)	Yes
Change in rainfall (increase or decrease)	Yes
Climate variability (larger or smaller)	Yes
Intensity and frequency of extreme events (larger or smaller)	Yes
Is the project expected to have an impact on climate change (i.e. contribute to greenhouse gas emissions)?	No, Yes, TBD
Is the project expected to be a significant emitter of greenhouse gases?	No
Step 2: Exposure Assessment	
Is the project located in exposed areas to weather-related natural hazards?	No, Yes, TBD
Low-lying areas (valleys, coastal zones, and small islands)	Yes
Very warm areas (subtropical)	Yes
Tropical areas (rainforests)	No
Arid and semi-arid areas (deserts)	Yes
Mountains zones and permafrost areas (tundra)	No
River banks	Yes
Does the project target agricultural systems, ecosystems or livelihoods exposed to weather-related hazards?	No, Yes, TBD
Is crop production frequently affected by rainfall variability, prolonged droughts, changes in temperature or pests and diseases?	Yes
Is livestock productivity frequently affected by rainfall variability, prolonged droughts, changes in temperature or diseases?	Yes
Are fisheries frequently affected by ocean acidification, water salinity and changes in sea surface temperature due to ocean-atmospheric oscillations or climate change?	Yes
Is forest productivity frequently affected by wildfires, diseases, rainfall variability, prolonged droughts, or changes in temperature?	No
Is the biodiversity in the project area likely to be affected by changes in climate variables?	Yes
Is any stage of the agricultural value chain (production, storage, processing and marketing) exposed to climate related hazards?	Yes
Is any rural infrastructure likely to be affected by flooding, landslides, changes in temperatures, and extreme winds.	Yes
Step 3: Sensitivity Assessment	
What are key sensitivities for the populations in the project's areas of intervention?	No, Yes, TBD
Is conflict exacerbating the population's sensitivity to weather related hazards?	No
Is population displacement being exacerbated by climate change impacts?	No

Are diseases (e.g. COVID-19, malaria, cholera) increasing the population's vulnerability and affecting their capacity to address potential weather-related hazards?	Yes
Is the income of the target population predominately coming from agriculture?	Yes
Are social inequalities (e.g. based on gender, youth, indigenous persons and other marginalized groups) being exacerbated by climate change?	No
Is the Human Development Index (HDI) equal to or below 0.6?	Yes
Is the Multidimensional Poverty Index (MPI) equal to or above 0.1?	Yes
Step 4: Adaptive capacity and climate resilience	
What are key adaptive capacities in the areas of project intervention?	No, Yes, TBD
Is the country well ranked in the Disaster risk reduction progress score?	Yes
Are climate and weather information services (real-time weather data, seasonal forecasts etc.) effectively being delivered (through radio, TV, SMS, extension services etc.) to farmers, rural dwellers, and end users?	No
Does the project country have an early action plan (preparedness and emergency response) to mitigate the impacts of weather-related hazards once the shock occurs?	Yes
Does the government or other institutions support the target population/communities with the necessary social and economic resources to prepare for or respond to climate-related events?	No
Is the target community carrying out (using their own means) agricultural adaptation?	No
Does the target population have the economic means or support to adjust or adapt their activities in response to weather related shocks?	No
Do policies/mechanisms exist that make financial credit, loans, and agricultural insurance available?	Yes
Are rural infrastructures effectively delivering services to farmers and rural dwellers?	No

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 6: First Annual Work Plan and Budget (AWPB)

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

Sindh Coastal Resilience Project (SCRP)
PLANNING & DEVELOPMENT DEPARTMENT
ANNUAL WORK PLAN / BUDGET FOR FY 2025-2026 & 2026-2027

SUMMARY

Results #	Objectives/Expected Results	Total Project Cost (as per PC-1)		Planned Cost (2024-25/2025-26)		Financial Ratio				Annual Expenditure (2023-24)	%	Progressive Expenditure PKR	%	Comments
		PKR	USD	PKR	USD	IFAD PKR	GoS PKR	Benef PKR	Private Sector PKR					
1. Transformation of Coastal Rural Incomes														
A	Value chain support	229 687 278	756 197	27 133 116	89 330	23 063 149	4 069 967			-	-	0%	-	0%
B	Institutional Support	606 555 726	1 996 957	227 346 593	748 491	193 244 604	34 101 989			-	-	0%	-	0%
C	4P Development	1 122 659 815	3 696 121	-	-	-	-			-	-	0%	-	0%
D	Community Physical Infrastructure	8 697 900 793	28 636 007	979 048 047	3 223 310	832 190 840		146 857 207						
E	Value Chain Support Infrastructure	1 774 191 948	5 841 153	86 363 987	284 335	69 091 190		17 272 797						
F	Financial Inclusion - Loan Subsidies/Grants	6 721 585 778	22 129 406	1 345 321 383	4 429 187	1 345 321 383								
G	Financial Inclusion - Loan Scheme	45 445 399 593	149 619 410	3 391 226 942	11 164 901				3 391 226 942					
	Sub-Total	64 597 980 931	212 675 252	6 056 440 068	19 939 554	2 462 911 165	38 171 956	164 130 005	3 391 226 942	-	0%	-	0%	
2. Economic and Social Inclusion of Disadvantaged Groups														
A	Economic Graduation of Landless Poor	5 388 710 553	17 741 195	735 444 050	2 421 294.69	735 444 050			-	-	0%	-	0%	
B	Job Market Integration of Youth	4 508 334 481	14 842 742	586 319 650	1 930 334.00	586 319 650			-	-	0%	-	0%	
C	Institutional Support to STEVTA	511 472 243	1 683 915	491 279 394	1 617 433.97	417 587 485	73 691 909		-	-	0%	-	0%	
	Sub-Total	10 408 517 277	34 267 852	1 813 043 094	5 969 063	1 739 351 185	73 691 909	-	-	-	0%	-	0%	
3. Project Management & Policy Support														
I	CAPITAL COST													
A)	Project Management Unit (PMU)/DCUs	1 227 327 556	4 040 717.58	149 707 088	492 879	82 338 899	67 368 190			-	0%	-	0%	
II	RECURING COST													
	project Management Unit (PMU)/DCUs/lps	2 747 990 094	9 047 178.82	347 946 464	1 145 540	191 370 555	156 575 909		-					
II	Contingencies - Physical/Financial													
	Sub-Total	3 975 317 651	13 087 896	497 653 552	1 638 420	273 709 454	223 944 098	-	-	-	0%	-	0%	
	GRAND TOTAL	78 981 815 858	260 031 000	8 367 136 714	27 547 036	4 475 971 804	335 807 964	164 130 005	3 391 226 942	0%	0%	0%	0%	

Community/Value Chain Infrastructure												
Community Physical Infrastructure												
A	Rural Roads and Landing Sites											
1	Design and Construction Cost	100 000	78	5 287 566					4	90%	10%	271 157
B	Solar Powered RO Plants											
		10 000	144	1 893 149					9	90%	10%	118 322
C	Irrigation Efficiency											
1	On-farm Irrigation Improvements /b	30 000	460	10 940 438					67	90%	10%	1 593 499
2	Storage Pond	20 000	252	3 468 302					27	90%	10%	371 604
3	On-farm Drainage	10 000	126	868 617					45	90%	10%	310 220
Sub Total				22 458 072								2 275 323
D	Sanitation Improvement											
1	Household Latrines	350	11 500	3 753 734					1 000	90%	10%	326 412
E	Street Pavement											
1	Brick soling	11 000	36	373 678					3	90%	10%	31 140
2	Tuftile Pavement	18 000	36	611 474					3	90%	10%	50 956
Sub Total				985 152								82 096
F	Household Solar Power											
		300	5 090	1 439 049					500	90%	10%	150 000
G	Value Chain Support Infrastructure											
1	Aggregation/Grading Platform	8 000	115	843 042					2	90%	10%	14 662
2	Crops Processing and packaging Equipment	10 000	207	1 831 976					9	90%	10%	79 651
3	Fish Catch Packaging/Marketing Support	10 000	58	538 137					3	90%	10%	27 835
4	Crab/Fish/Shrimp Rearing Pond	6 000	188	1 040 856					4	90%	10%	22 146
5	Fish landing Site Infrastructure	50 000	34	1 587 142					3	90%	10%	140 042
Sub Total				5 841 153					21			284 335
Sub Total				34 477 161								
Financial Inclusion												
A	Capacity Building for Financial Inclusion											
1	Interest Group Financial Literacy Training	0.359	500	167					65	100%		22
2	Credit Delivery Staff Training	108	500	30 761					65	100%		3 999
Sub Total				30 928					130			4 021
B	Credit Subsidies/Matching Grant											
1	First Loan - Interst Free	155.835	55 000	10 408 871					6000	100%		1 135 513
2	Second Loan - 50% Subsidy on Interest	155.835	45 000	8 689 607					1500	100%		289 654
Sub Total				19 098 478					7 500			1 425 167
C	Credit Guarantee Fund											
		LS		3 000 000					1 500			3 000 000
D	Loan Scheme											
1	Agriloan Scheme - Participating Banks	1 220 826	55 000	81 544 149					6000		100%	8 895 725
2	Fisheries Loan Scheme - Participating Banks	1 220 826	45 000	68 075 261					1500		100%	2 269 175
Sub Total												
Sub Total				171 748 816					7 500			11 164 901
Grand Total				212 675 252								19 939 554

Sindh Costal Resilience Project (SCRP)

PLANNING & DEVELOPMENT DEPARTMENT
ANNUAL WORK PLAN / BUDGET FOR FY 2025-2026 & 2026-2027

2. Economic and Social Inclusion of Disadvantaged Groups

(Rs.in Million)

S.NO	DETAILED COST	Approved PC-1			2024-25		2025-26				Planned Physical	Financial Ratio				REMARKS
		Unit Cost	Physical Targets	Total Project Cost	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 3		IFAD	GOS	Benef./ Private Sector	TOTAL	
I	INVESTMENT COST															
A	Economic Graduation of Landless Poor															
	1 Labour market survey	20 000	1	20 400							1	100%				20 400
	1 Livelihood Improvement Plan Preparation		20 500	848 939							2500	100%				
	2 Training of Beneficiaries for Asset	50	13 250	1 181 219							2500	100%				222 872
	1 Livestock Asset	500	15 400	7 251 148.6							2250	100%				1 059 421
	2 Service Provision Assets	300	6 450	1 800 524.3							450	100%				125 618
	3 Crafts/manufacturing Assets	300	4 900	1 390 337.4							1050	100%				297 929
	4 Land lease and Cultivation Package	500	8 500	3 986 724.4							1350	100%				633 186
	5 Other	200	6 648	1 261 902.1							1500	100%				284 741
	Sub Total			17 741 195												2 400 895
B	Job Market Integration of Youth															
	1 Vocational Training for Employment	200	25 500	4 669 612							3 000	100%				549 366
	2 Vocational Training for Self-enterprise	200	22 100	4 069 252							3 000	100%				552 387
	3 Start up Grants for Self-enterprises	300	22 100	6 103 878							3 000	100%				828 581
	Sub Total			14 842 742												1 930 334
C	Institutional Support to STEVTA															
	1 Training Facility Up-grades	100 000	9	856 557							4	100%				380 692
	2 Training of STEVTA Trainers	5 000	50	250 000							50	100%				250 000
	3 Curriculum Development	10 000	12	120 000							12	100%				120 000
	4 Training facility/logistics Costs	1 800	270	447 620							35	100%				58 025
	5 Additional Service Provider			9 737							1					808 717
	Sub Total			1 683 915												1 617 434
Grand Total				34 267 852												5 969 063

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 7: Procurement Plan for first 18 months

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

Procurement of IT Equipment Note Books (x7) Printer/copier/scanner/Fax (4x1) Printers (x3)	Yes	Various	Plan	Post-Qual	Prior Review	NS	1	9,078.00
			Actual					
Procurement of Vehicles for PMU and DCUs Double Cabins x 4 Cars 1600cc x 2 + 1000 cc x 5 Motorcycles x 5	Yes	Various	Plan	Post-Qual	Prior Review	NCB	1	236,640.00
					Prior Review	NCB	1	116,360.00
			Actual		Post Review	NS	1	2,875.00
Procurement of Updated Version of Tompro (Accounting Software)	Yes		Plan		Prior Review	DC	1	10,200.00
			Actual					
Procurement of Furniture and Equipment for DCUs x 3	Yes	Various	Plan	Post-Qual	Prior Review	NCB	1	73,380.00
			Actual					

WORKS

Description	Funding	LOTS	Plan / Actual	Prior or Post Review	Procurement Method	Envelopes	Amount (USD)
Design, Civil Works /Community Valu Chain Infrastructure	IFAD-GoS	Various	Plan	Prior Review	NCB	1	7,460,380.00
			Actual				
			Plan				
			Actual				

Consulting Services

Description	Funding	Procuring Entity	Plan / Actual	Procurement Method	Amount (US\$)	Prior/Post Review
Hiring of Services of Implementation Partner (IP)	IFAD & GoS	PMU	Plan	QCBS	2,987,713.00	Prior Review
			Actual			
Baseline Survey	IFAD & GoS	PMU	Plan	LCS	10,200.00	Prior Review
			Actual			
Impact Assessments	IFAD & GoS	PMU	Plan	LCS	9,898.00	Prior Review
			Actual			
Videos Documentaries x18	IFAD & GoP	PMU & DCU	Plan	LCS	29,992.00	Prior Review
			Actual			
Mid Term/End Term Assessments	IFAD & GoS	PMU	Plan	LCS	9,166.00	Prior Review
			Actual			
Hiring of STEVTA (Trainings)	IFAD & GoS	PMU	Plan	QCBS	842,737.00	Prior Review
			Actual			
Hiring of Professional Staff Project Director	IFAD & GoS	PMU	Plan	ICS	149,600.00	Prior Review
			Actual			
Value Chain Specialist	IFAD & GoS	PMU	Plan	ICS	78,164.00	Prior Review
			Actual			

Gender and Nutrition Specialist	IFAD & GoS	PMU	Plan	ICS	78,164.00	Prior Review
			Actual			
Climate Change and Adaption Specialist	IFAD & GoS	PMU	Plan	ICS	78,164.00	Prior Review
			Actual			
M&E Specialist	IFAD & GoS	PMU	Plan	ICS	78,164.00	Prior Review
			Actual			
M&E Officer	IFAD & GoS	PMU	Plan	ICS	74,905.00	Prior Review
			Actual			
Communication/Knowledge Management Specialist	IFAD & GoS	PMU	Plan	ICS	78,164.00	Prior Review
			Actual			
Micro Finance Specialist	IFAD & GoS	PMU	Plan	ICS	78,164.00	Prior Review
			Actual			
Manager Finance and Accounts	IFAD & GoS	PMU	Plan	ICS	112,200.00	Prior Review
			Actual			
Procurement Specialist	IFAD & GoS	PMU	Plan	ICS	112,200.00	Prior Review
			Actual			
Manager Internal Audit	IFAD & GoS	PMU	Plan	ICS	39,046.00	Prior Review
			Actual			
District Coordinator x 3 (DCUs at Thatta, Badin and Sujawal)	IFAD & GoS	PMU/DCUs	Plan	ICS	170,415.00	Prior Review
			Actual			

M&E Officer x 3 (DCUs at Thatta, Badin and Sujawal)	IFAD & GoS	PMU/DCUs	Plan	ICS	128,706.00	Prior Review
			Actual			
Value Chain Officer x 3 (DCUs at Thatta, Badin and Sujawal)	IFAD & GoS	PMU/DCUs	Plan	ICS	93,213.00	Prior Review
			Actual			
Admin & Finance Assistant x 3 (DCUs at Thatta, Badin and Sujawal)	IFAD & GoS	PMU/DCUs	Plan	ICS	62,142.00	Prior Review
			Actual			
Business Support Facilitator x 3 (DCUs at Thatta, Badin and Sujawal)	IFAD & GoS	PMU/DCUs	Plan	ICS	93,213.00	Prior Review
			Actual			
Project Completion Report	IFAD & GoS	PMU	Plan	ICS	4,509.00	Prior Review
			Actual			

SUMMARY

Procurement Activities	Plan		Actual		
	Currency	USD (M)	PKRs	USD (M)	PKRs
Goods		0.46			
Works		7.46			
Consulting Services		6.99			
Non-Consulting Services					
TOTAL		14.91	-	-	-

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 8: Project Implementation Manual (PIM)

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department



Investing in rural people

Pakistan

Sindh Coastal Resilience Project (SCRP)

Project Implementation Manual

Document Date: **15-Jul 2024**

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CURRENCY EQUIVALENTS

Currency Unit

US\$1.0 = Rs. 280.00

WEIGHTS AND MEASURES

1 kilogram = 1000 g

1 000 kg = 2.204 lb.

1 kilometre (km) = 0.62 mile

1 metre = 1.09 yards

1 square metre = 10.76 square feet

1 acre = 0.405 hectare

1 hectare = 2.47 acres

ABBREVIATIONS AND ACRONYMS

4P/PPPP	Public Private Producers’ Partnership
ADB	Asian Development Bank
ADP	Annual Development Programme
AG	Accountant General
AGP	Auditor General of Pakistan
APRM	Accounting Policies and Procedures Manual
AWPB	Annual Work Plan and Budget
BISP	Benazir Income Support Program
CMF	Contract Monitoring Form
CMFS	Community Managed Financial Services
COs	Community Organizations
COA	Chart of Accounts
CQS	Consultant’s qualifications-based selection.
CR	Contract Register
DAC	Departmental Accounts Committee
DCU	District Coordination Unit
DDO	Drawing and Disbursement Officer
EAD	Economic Affairs Division
EOI	Expression of Interest
FA	Financing Agreement
FBS	Fixed-budget Based Selection
FD	Finance Department
FMS	Financial Management Specialist
GFR	General Financial Rules
GoP	Government of Pakistan
GoS	Government of Sindh
GPN	General Procurement Notice
IA	Implementing Agency
IAC	Internal Audit Cell
ICB	International Competitive Bidding
ICP-CM	IFAD Client Portal – Contract Monitoring
IFAD	International Fund for Agricultural Development
IP	Implementing Partner
ISO	International Standards Organization
IT	Information Technology
ITB	Invitation to Bid
IUFR	Interim Unaudited Financial Reports
LCS	Least-cost-based Selection
LTB	Letter to the Borrowers
M&E	Monitoring and Evaluation
MTR	Mid Term Review
NAB	National Accountability Bureau
NCB	National Competitive Bidding
NBP	National Bank of Pakistan
NS	National Shopping
O&M	Operation and Maintenance
PC1	Planning Commission Performa 1
PD	Project Director
PDR	Project Design Report
P&DD	Planning and Development Board

PEFA	Public Expenditure and Financial Accountability
PIM	Project Implementation Manual
PMU	Project Management Unit
PO	Purchase Order
PP	Procurement Plan
PPRA	Public Procurement Regulatory Authority
PS	Procurement Specialist
PSC	Project Steering Committee
PTS	Procurement Tracking System
QBS	Quality-based Selection
QCBS	Quality and Cost-based Selection
QPR	Quarterly Progress Report
REO	Request for Expression of Interest
RFP	Request for Proposal
RFQ	Request for Quotation
SBD	Standard Bidding Document
SBP	State Bank of Pakistan
SOE	Statement of Expenditure
SPN	Special Procurement Notice
SSS	Single Source Selection
SWOT	Strengths, Weaknesses, Opportunities and Threats
STEVTA	Sindh Technical and Vocational Training Authority
TVET	Technical and Vocational Training
TOR	Terms of Reference
VFM	Value for Money
VO	Village Organisation
WA	Withdrawal Application

I. PURPOSE OF THE MANUAL

1. This PIM has been developed to support PMU and implementation partners in the implementation of Sindh Coastal Resilience Project. It is meant to assist the project understand and comply with technical requirements while planning and implementing the project components and activities their in. It includes detailed guidance including workable/simple templates for consistent application of required guidance in field and holding the staff accountable—if they deviate from the established technical requirements. The manual also briefly describes institutional arrangements---including project governance, staffing, and M&E to establish the context.
2. In addition to this volume of PIM—which focuses mostly on technical requirements, the SCRCP shall follow the requirements contained in the Financial Management PIM, and Procurement PIM which are separately provided. References have been given in this manual where appropriate for this purpose. PIMs are living documents and shall be revised/updated as per evolving situation during project implementation and to ensure that it facilitates the intended project outcomes. All future revisions and updating will be subject to IFAD review and Project Steering Committee approval.

A. PROJECT DESCRIPTION

3. **SCRCP goal** is to alleviate poverty and address food and nutrition insecurity within rural poor households, incorporating a gender-sensitive, youth-focused and climate change-responsive approach.
4. **Project Development Objective (PDO)**¹ is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production of diversified nutritious foods under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and services; (ii) Improved productive asset base for the ultra-poor and Increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to financial resources and support services.
5. **Project Target Groups:** Project target groups include smallholder farmers (up to 16 acres of land), tenants and sharecroppers working on large land holdings, resource poor fisherfolk and landless poor daily wage earners. There are 115,650 farms in three districts out of which 96,600 farms can be categorized as small farms.² 84 percent of households are landless and earn their living as tenants, sharecroppers and daily wage earners. There are around 11,000 fisherfolk households and 90 percent of them work as hired hands on other’s boats. Women headed households will be in particular targeted. Young³ men and women from poor households with a poverty score of 0-32 will be offered opportunities for skill development for labour market, value chain participation and off-farm enterprises. Gender and youth will be mainstreamed in all facets of planning, implementation and outcomes. Of direct beneficiaries, **40 percent will be women and 30 percent youth**. Among youth a 60:40 ratio will be ensured for males and females respectively.
6. **Project Beneficiaries:** An estimated 196,000, households (1.0 million persons), almost 30 percent of the total rural households in the three districts, will directly and indirectly benefit from the project. Smallholder farmers, fisherfolk and landless poor in 500 revenue villages (*Deh*) will be engaged through 500 village Organizations in first five years of project implementation (160 in

¹ Of IFAD parallel financed component in SCRCP.

² Pakistan Bureau of Statistics. 2016

³ age 15-29

Badin, 125 in Sujawal and 215 in Thatta). Under each VO, specific interest groups based on commonality of production base, vocation and interest will be supported through a participatory process, operating under an inclusive umbrella plan, covering all segments of target groups, prepared and supervised with the assistance of professional implementation partners. The participatory process will ensure nutritious crops and commodities are identified that can address the challenges related to nutrition while also being climate-resilient and economically viable. The engagement with the VO will also attempt to map the local indigenous foods that are climate resilient and nutritionally superior, and work on a plan to explore its mainstreaming into diets of communities. Apart from agriculture and fisheries production groups, interest groups among the landless and youth will be promoted to earn incomes from provision of various inputs and output harvesting, processing, value addition and marketing. The incremental approach is aimed at leading to a critical mass of producers of niche products and marketable surpluses in each region to enable them to enter 4P partnerships.

7. **Taluka, Union Council and Village Targeting:** In geographical targeting, the project will align its interventions, to the possible extent, with larger ADB climate impact mitigation green and gray infrastructure investments for enhanced impact. The climate and environment related larger investments identified in the village umbrella plans will be submitted to ADB's Management Units and coordinated through joint Project Steering Committee. Sensitivity to climate change will therefore be one of the primary criterion for selecting villages. Subject to that, the project will use a composite criterion for the targeting of poorest Talukas and Union Councils therein. The criteria will include NSER poverty ranking of Talukas and Union councils within the target Taluka, agriculture and/or livestock and fisheries value chains development potential, prevalence of smallholder farming and fishing, high vulnerability to climate hazard, and consideration of other recent and/or ongoing development projects and government's annual development plan interventions. SCRPs will cover three poorest Talukas in Thatta and two each in Sujawal and Badin⁴. In targeted Talukas, 53 Union Councils will be covered, including all coastal UCs with predominantly fisherfolk population. The UC coverage in selected Talukas in each district will be Badin (23), Sujawal (12) and Thatta (18). Within the selected Union Councils, the 500 villages (*Deh*)⁵ selection will be prioritised on the same criteria as used for the UC selection. The target numbers and intra-district allocations will be reviewed at MTR.
8. **Project Design and Approach:** Project design and approach is influenced by lessons learned in successful on-going IFAD projects within Pakistan and in the region. Establishment of market-oriented farmer interest groups is based on the success of similar initiatives in SPPAP and GLLSP-I and II. The socio-economic development of disadvantaged groups is based on the successes and impact of Southern Punjab Poverty Alleviation Project (SPPAP) and National Poverty Graduation Programme (NPGP) which is covering 23 Union councils in the SCRPs target districts as well. An inclusive all-village approach will be adopted in targeted villages so as to leave no one behind. The social capital available in most of villages under NRSP and SRSO supported social mobilization will be built upon but with a difference. Instead of Community Organizations of 18-20 households with multiple COs in same village, inclusive Village Organizations will be supported leading to formation of interest groups based on member's vocations, resource base, potential and preference.
9. The project intervenes in districts characterized by a large economic and social dependence of smallholders on landowners and middlemen, a large proportion of landless poor, fast degrading ecosystems and increasing climate hazards. These realities have interlinked consequences: low

⁴ Badin and Shaheed Fazil Rahu in Badin, Jati and Shah Bandar in Sujawal and Ghora Bari, Keti Bandar and Mirpur Sakro in Thatta.

⁵ *Deh* denotes a Revenue Village in Revenue Record of Lands which most often consists of more than one natural villages and settlements of different sizes.

agricultural productivity, limited income generation opportunities and high vulnerability to shocks, food security and malnutrition. To strengthen rural resilience and fight rural poverty, the project will consider the three root causes and address the three consequences, maximizing the interrelations and the opportunities for integration of the mainstreaming themes (Youth, Gender Equality and Women Empowerment, Nutrition, Climate and Environment) through a system approach together with the ADB supported components (related to ecosystems restoration).

B. Components/outcomes and activities

10. **Project Components:** The project consists of three complementary components that address the causes of vulnerability, poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. It will be done in a gender and youth sensitive manner with a principle of ‘No-One-Left-Behind’.

- Transformation of Coastal Rural Incomes: Rural communities organized and assisted to develop capacities for market oriented improved productivity and production of diversified nutritious commodities adapted to the climate and ecosystem contexts, and value addition and transition to higher value outputs/products, based on structured sustainable value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.
- Economic and social Inclusion of Disadvantaged Groups: (job market and small business development), facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored business, technical and vocational service provision.
- Project Management and Policy Support: Establishment of an efficient project management structure: a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing in buffer zone etc. support for innovative projects, focused on local sustainable development, and encouraging GEWE, youth inclusion, better nutrition and climate adaption.

11. **Component 1: Transformation of Coastal Rural Incomes:** The objective under this component is to organize the target villages for development and implementation of inclusive income generation plans for different income groups. This will be achieved through three mutually reinforcing sub-components:

12. **Sub-Component 1.1: Organization, Planning & Training:** Project will cover 500 villages of agricultural and fishermen communities, in 53 Union Councils, selected as per project’s selection criteria, in the first five years of the project. Almost all villages in the three districts have some form of community/village organization which will be used as Project’s entry point by the implementing partners, and will be further reorganized and strengthened to ensure equitable inclusion of all project target groups. Villages that otherwise qualify as target villages but with no village organization, will be assisted to establish one. Services of Implementation Partners (IPs), with demonstrated capacity for social mobilization, agriculture nutrition-sensitive value chain development and poverty graduation of landless poor, will be engaged for this purpose.

13. **Umbrella Village Plan (UVP):** Umbrella Village Plan preparation will be on a standard format issued by PMU for guidance and observance. A Draft Template is attached to PIM for guidance. The

plan will identify and facilitate implementation of core project investments and main-streaming concerns. Part 1 of the plan will cover production, productivity and value chain development challenges and response, including challenges related to climate change and nutrition, identification of interest groups for support, subsidized credit needs of the beneficiaries and identified extension support partners. Part 2 of the plan will identify the social and value chain support infrastructure investments, as well as infrastructure needs to mitigate climate change impacts (both for IFAD and larger ADB investments), estimated costs and phasing. Part 3 of plan will identify the beneficiaries for poverty graduation interventions and job -market integration of the youth. Part 4 of the plan will cover interventions related to mainstreaming aspects including gender, nutrition, WASH etc. Each Plan will be of two and half year (30 months) duration or 5 cropping cycles. The plan in the first stage will address the existing challenges of sub-optimal production, lack of aggregation, middlemen dependence for inputs and marketing, weak extension support, climate vulnerability and climate adaptation, quality assurance and value addition.

14. **Interest Groups:** Project will cover, on average, about 400 households in each revenue village consisting of smallholder farmers, fisherfolk, tenants and sharecroppers, landless poor including youth and women. On approval of each interest group's plan, funds will be transferred to IPs for implementation. Examples of interest groups include: crops production, high value crops that are nutritionally rich and climate-resilient, products aggregation, integrated farming (agriculture, livestock and fish), value addition and marketing, agri service provision, livestock for meat/fattening, dairy production, marketing, value addition, fisheries, aquaculture, mariculture, fisheries processing, preservation, grading, marketing, traditional crafts production/marketing etc. The Project will also support Livestock interest groups for both dairy and meat animals. Interest Groups, particularly of youth, interested in provision of input supply, harvest services, pest management, product processing, safe storage, refrigerated transport if needed, packaging & nutrition labelling and value addition, product marketing services, off-shore/inland aquaculture development will be prioritised. They will be linked to credit services for procurement of required equipment and small machines for service provision, enterprise upscaling etc.

15. **Sub-component 1.2 Community and Value Chain Support Infrastructure:** The VO development roadmap will provide the basis to identify and prioritize georeferenced community infrastructure investments while interest groups plans will be the basis for identification of value chain related investments/infrastructure. Women priorities in community infrastructure will be separately identified and given additional weightage. Each VO will be eligible, on average, for a grant of US\$ 50,000. Investments in an individual Union Council under this sub-component should not exceed the average allocation of 470,000 per Union Council.

16. **Sub-Component 1.3: Access to Affordable Finance:** The component objective is to expand the access to finance for the project's beneficiaries by integrating them into the formal financial sector. This is aimed at ending the beneficiaries' reliance on exploitative sources of informal credit, improve access to formal bank financing, establish their credit history, reduce their cost of production, utilize the advised levels and types of inputs to increase productivity, de-collateralize their produce from the traders/middlemen/dealers, and allows the beneficiaries to enter into higher priced sale contracts. It will open up avenues for additional services like crop insurance and digital banking services. As this upstream intervention progresses and the Project beneficiaries gain trust and confidence in the continuity of the availability of formal financial services, they will have an incentive to invest in value addition activities to further increase their incomes and bargaining power in their existing value chains.

17. Target beneficiaries for this sub-component will be smallholder farmers, tenants, sharecroppers, fisherfolk working on others' boats and young men and women supported by project in self-enterprises who wish to further scale them up. Main production activities and value chains to be financed include: vegetables (tomato, chilies, others), melons, paddy, wheat, small fishing boats and gear, off-shore aquaculture, small ruminants, dairy, and poultry.

18. SCRP's credit component is structured to benefit all segments of target beneficiaries. Credit services will be delivered by several participating microfinance banks/institutions and commercial banks operating a compliant Environment and Social Management System and portfolio risk management for financial return and sustainability (FI board approved policy, risk identification process, internal institutional capacity, reporting and monitoring). In addition, the FIs should have a well-defined grievance redress mechanism.

The main features of the subsidized credit facility include:

- (i) low cost / subsidized credit up to a maximum of two loan cycles with a maximum loan amount of US\$ 1,808 (PKR 500,000) per loan per beneficiary and an average loan amount of US\$ 1,579 per loan per beneficiary in local currency;
- (ii) beneficiaries will be charged 10% p.a. for the first loan and 20% p.a. for the second loan by the lending institution and remaining part of interest will be paid as subsidy by the project. Following two cycles, the beneficiaries will have a credit history and account to access credit at the prevalent market rates from banks. Phasing out of subsidies over two loan cycles is done to prevent reliance or dependence on subsidies and the graduate borrowers into a standard commercial relationship with credit providers;
- (iii) the purpose of the financing will be to allow smallholder farmers to purchase crop and livestock inputs and fisherfolk to purchase boats and the related equipment;
- (iv) the tenor of the loans offered to the beneficiaries will be 6 months and 1 year;
- (v) the partner financial institutions will utilize their balance sheet funding to lend to the Project beneficiaries;
- (vi) core credit funds deployment by partner banks is estimated to be US\$ 53 million which will be revolved during the Project life equivalent to US\$ 149.619.
- (vii) A Credit Manual will be developed, as part of Project Implementation Manual to provide detailed guidelines and procedures for the implementation of the subcomponent.
- (viii) Apart from credit, the partner banks will offer additional financial services including insurance, savings, remittances and payments. It is expected that during the 7-year project life, partner financial institutions will extend 100,000 loans to 55,000 Project beneficiaries. The Project will incur a cost of USD 195.62 per loan under the structure. The Project will encourage the lending financial institutions to cross-sell insurance products, including climate risk insurance, savings, remittances and payments to the borrowers. Banks will be required to obtain crop and livestock insurance for all loans disbursed for these two sub-sectors, as mandated by the State Bank of Pakistan. It will also be important for partner banks to collaborate with insurance companies to assess the impact of climate change and natural disasters and to design and offer climate risk insurance products, preferably parametric insurance to the beneficiaries.
- (ix) Being an innovative approach with high level of co-financing excepted from the private sector, the PMU and IFAD will closely monitor the roll out of the access to finance scheme. If issues are observed, the PMU will be assisted to initiate timely action to address the causative factors. Possible factors/challenges include: (i) ineffective roll out of the scheme by State Bank and/or by private sector banks and/or poor coverage of project target beneficiaries; (ii) beneficiaries dissatisfaction with the level of subsidy being offered; and, (iii) type of loan products do not meet beneficiary needs or expectations. PMU and IFAD shall consider, for each of the eventuality: (i) consider alternate implementation arrangements including RSPs for the implementation of credit component with any required review of level of subsidy, sustainability and exit strategy; (ii) review the subsidy

levels including consideration of a mix of subsidy and matching grants; and, (iii) rejig the loan products and terms to be more responsive to beneficiary needs and expectations.

19. **Sub-Components 1.1 and 1.2** will be implemented through Institutional Support of public and private sector entities including agriculture extension/research, Livestock and Fisheries and STEVTA and professional partners with capacity for social mobilization and agri value chains development plus commercial banks for access to finance component.

20. Agriculture Supply and Prices Department and Livestock and Fisheries Department are the two key relevant government extension departments which will assist the IPs and VOs in implementation of value chain development activities in agriculture, horticulture, livestock and fisheries. The budgetary allocation under the project is aimed at building capacities of these two extension services to provide demand-based agriculture, livestock and fisheries/aquaculture extension services to beneficiary VOs/interest groups as per their development plans. Engagement of these two agencies will be covered under performance-based MOU/MOAs between the PMU and the two departments and detailed TOR and performance indicators. Exact scope of these two departments support work emerge from the VOs and interest groups' development plans. The lumpsum budget provisioned for this purpose in the PC-I will be apportioned between investment and operational costs through mutual consultation of PMU and concerned department on the basis of needs for support identified in VO plans and MOU/A. This detailed budget will be made part of the MOU/A. Performance against MOU/As will be annually reviewed and placed before PSC with recommendations by PMU. The budget will cover some basic office equipment, mobility costs of staff, staff training, and project related operational overheads for field, Taluka and District level offices. Cost on community trainings and demonstrations for crops, high value products, processing aggregation, fisheries, aquaculture and transversal aspects is budgeted under sub-component 1.1.

21. Project may engage additional specialized extension and research service providers on need basis against specific TOR and outputs.

22. Public and private service providers engagement will be on the basis of proven capacity and experience with regards to supporting resilient VC and business opportunities. Their existing skills and know-how will be considered to deliver better support to targeted groups in the three districts.

23. **Sub-Component 1.4: Policy Support & Innovation Challenge Fund:** Project will support the provincial government in some key areas of project relevance for policy review and reform. These may include policy review and dialogue on tenancy and land tenure arrangements, policy and regulations for housing land ownership rights and provision of civic services in coastal buffer zone communities, policy on land lease for off-shore aquaculture to fishing communities, policy on affordable agriculture and rural development credit, agriculture marketing and service provision standards and enforcement mechanisms, institutionalized access to local government development resources for village and farmer organizations, and climate adaptation, etc.

24. **Innovation Challenge Fund and Its Management:** To generate evidence-based foundation for some of the key policy area, an innovation challenge fund will be established under the PMU. The Innovation Challenge Fund will be used to identify innovative and cost-effective solutions for production, marketing, value addition, land tenure and access, climate, environmental and nutritional challenges faced by target communities. Some indicative areas for solution development under the challenge fund are: agriculture waste/residue management (e.g. rice straw is currently burned in the fields contributing to pollution and smog – how local poor/youth can convert it into remunerative products; improved storage, transport and packaging of food items, reducing post-harvest food losses, social marketing of nutritious food items, processing of banana plants residues; local formulation and cost-effective production of feed for fish and shrimp, cost effective models of household latrines etc.). Solutions that contribute to improved nutrition, empower women or provide job opportunities to young people will be prioritized. Participating institutions are expected to offer matching funds to participate in fund financed interventions. Implementation cycle will involve: (i) Selection of critical

themes relevant to project area and beneficiaries, project objectives and outcomes, smallholder economic development, climate change adaptation, improved nutrition etc. in consultation with IPs and relevant government agencies; (ii) Advertisement of theme, outlining objective and desired outcome/solution sought for technical and financial proposals; (iii) A PMU based broad based committee with concerned sectoral experts and academia for each theme to evaluate proposals and formulate recommendations; (iv) Approval of selected proposal by PSC and No Objection from IFAD; (v) TOR for successful bidder, workplan and milestones under an overall agreement including approved budget and payment schedules; (vi) Regular review of progress by PMU; (vii) Evaluation of final report and solution proffered by committee that approved the theme; (viii) Plan for approved solution's replication by PMU under the project and through government policy and regulatory instruments. Fund administration and processes are detailed in PIM.

25. The challenge fund will be initiated sufficiently early in project implementation to allow possible scaling up of identified solutions via component 1 or 2. VOs will also be eligible to compete for this fund, as well as NGOs, public sector and private MSMEs jointly with VOs or farmers.

26. **Component 2: Economic and social Inclusion of Disadvantaged Groups:** The objective of this component is to assist the rural landless poor to sustainably increase their incomes and get out of poverty trap and assist young women and men from poor families to learn skills for job market and/or self-enterprise. Component 2 consists of two sub-components: (i) Economic Graduation of Landless Poor BISP beneficiary families, and (ii) Job Market Integration of male and female youth from households with poverty score 0-32. Targeting of households will be guided by NSER data.

27. **2.1 Economic Graduation of Landless Poor:** Target landless poor BISP beneficiary families will be provided with one or more income generating productive assets, for one or more members of the family, within budget ceiling of US\$ 500. Assessment will be carried out keeping the whole family in view rather than just the BISP beneficiary woman. The assets will be matched with overall household abilities, and operative livelihoods and market environment. Nature of the asset(s) will be such that it quickly adds to the income of the family. It can also be an asset or device that enables the family to take advantage of the income generation opportunities within the supported value chain e.g. a handheld reaper or mechanical tiller or a sheller or a processing, value addition or haulage equipment, equipment to collect organic waste and produce compost. In other cases, it can be an asset for off-farm income generating potential e.g. quality production of traditional crafts. Poor sharecropping families will be assisted to shift to leased land arrangements for greater profitability and economic independence. Around 30,000 households will be assisted. Per beneficiary costs will be reviewed annually by PSC to ensure that it remains compatible with the market situation. Kitchen gardening training will be imparted by Agriculture extension staff to each beneficiary households with one time provision of a package of area appropriate seeds and allied inputs.

28. **2.2 Job Market Integration of Youth:** The sub-component is aimed at achieving job-market readiness for the young men and women (15 to 29 years of age)⁶ from poor households through provision of vocational, technical and enterprise skills. Choice of vocations and technical skills will be guided by a rapid baseline Labour Market Survey by partner organization, in collaboration with STEVTA and availability of appropriate courses and training facilities within the project target area. The skills will be aimed at either finding remunerative salaried jobs or starting an income generating self-enterprise based on the learned skill. Some of these could be the skills and vocations linked to the supported value chains. Project support will cover both training costs and, for those opting for a self-enterprise, a start-up grants to cover cost for a starter set of implements, a rented space etc. STEVTA and other appropriate training service providers will be engaged for the purpose under performance-based MOU/As. The IPs and service providers will be required to facilitate the pass-outs in finding

⁶ Pakistan's official definition of youth, adopted by Sindh Youth Policy

salaried jobs or starting own enterprise based on the learned skill. Project will also encourage group-based enterprises where young men and women of similar interest and skills will be assisted to start an enterprise linked to value chain and other local market opportunities. Project will incur, on average, a per beneficiary cost of US\$ 350 and total 43,000 youth will be assisted, of which at least 40 percent will be women. Based on experience in other IFAD projects (SPPAP/NPGP), actual cost per beneficiary is likely to be less in case of a beneficiary getting skills training only and finding a job while those opting for self-enterprise will cost more due to dual element of training cost including stipend and a start-up grant. The approach and per beneficiary costs will be reviewed annually by PSC on the basis of experience and market situation.

29. **Institutional Support to STEVTA (US\$ 1.7 million):** STEVTA is the main technical and vocational training service provider in the project area. Experience in other projects (SPPAP, NPGP) has shown that most of the youth from target poor families do not meet the educational qualification requirements of regular TEVTA courses and need tailored training courses in terms of duration and curriculum. Such courses will need to be developed or adapted from ongoing courses in other projects like SPPAP and NPGP. Institutional support budget for TEVTA or private sector service providers is meant to enable service providers to develop need-based curriculum and supportive training materials and delivery mechanisms for that purpose. In particular, in case of female trainees, given their travel and stay constraints, some of the courses will have to be delivered in-situ for trainees from a cluster of villages at Union Council or Tehsil level. The allocated budget will meet those additional costs for arranging in-situ training, stipends and daily travel. A lumpsum provision has been made in the PC-I for the investment and operational costs of STEVTA and other service providers. Detailed costs will be agreed between PMU and STEVTA at the start of the project as part of the MOA to be signed between PMU and STEVTA for provision of project required TVET services.

30. **Component 3: Project Management:** An autonomous and empowered Project Management Unit at Karachi, administratively linked to P&D Board, and reporting to Project Steering Committee, will be responsible for project planning, coordination, financing, monitoring and procurements. Chairman P&D Board will head the PSC and the rest of membership will be drawn from relevant line departments, Finance Department and civil society. A District Coordination Unit in each of the three target districts, headed by a competitively selected Project Coordinator and supported by a small team of professional and support staff, will be responsible for planning, coordination, monitoring and reporting of project activities. Project will support the provincial government in some key areas of project relevance for policy review and reform.

31. **Component IV – Recovery from Climatic Calamities (RED Component):** Acknowledging the region's vulnerability to floods and water scarcity, the project includes a Response to Emergency and Disaster (RED) component. In case the Government of Sindh declares the project area (in total or part) affected by a climatic calamity, the project is authorised to trigger the RED Component. The RED component serves as an essential buffer, ensuring the project remains resilient and steadfast in achieving its objectives amidst sudden shocks in the coastal regions of Sindh.

C. Governance and Institutional Arrangements

32. At federal level, Economic Affairs Division (EAD), Government of Pakistan will be the overall coordinating agency at the Federal level for IFAD financing. Provincial Planning and Development Board (P&DD) shall be the lead implementing agency—because of the multisector nature of the project. The provincial government shall notify a Project Steering Committee (PSC) and establish a PMU as briefly narrated below for project oversight and implementation.

1. Project Steering Committee (PSC)

33. The policy level guidance, coordination and oversight will be provided by a Project Steering Committee (PSC). It will be the key forum to ensure complementarity of ADB and IFAD funded activities

including their geographical alignment. The PSC will grant approval of Annual Work Plan and Budget (AWPBs), Procurement Plans (PPs), conduct regular progress reviews and take corrective actions where warranted. PSC will have following composition and will be formally notified prior to start of the project:

i.	Chairman P&D Board	(Chairman)
ii.	Secretary Finance	(Member)
iii.	Secretary Industry, Commerce, and Technical Education	(Member)
iv.	Secretary Local Govt. and Rural Development	(Member)
v.	Secretary Agriculture Supply & Prices Department	(Member)
vi.	Secretary Livestock and Fisheries Department	(Member)
vii.	Secretary Social Protection Department	(Member)
viii.	MD, Sindh TEVTA	(Member)
ix.	Secretary Zakat, Ushar, Social Welfare, Special Education and Women Empowerment	(Member)
x.	Secretary Irrigation and Drainage	(Member)
xi.	Secretary Forest and Wildlife	(Member)
xii.	CEO(s) Social Mobilization Partner(s)	(Member)
xiii.	Project Director (SCRP)	(Secretary)

34. The PSC may co-opt additional members if need be to strengthen coordination and project synergies. The PSC shall examine the need for such additions to the existing membership in its meetings and take a formal decision thereon. The PSC will convene bi-annually (more often if necessary) on the basis of the agenda items prepared by PMU.

35. The specific responsibilities of the PSC include:

- i. Provide overall guidance and oversight to enable the project to reach its development objective in line with the financing agreement;
- ii. Take timely decisions and issue necessary direction to create enabling policy/regulatory environment for project implementation;
- iii. Ensure fair allocation of funds to the districts/regions by considering population, poverty profile, and value chain potential in each district/region. In cases where a region/district is not able to achieve performance targets established in the AWPB persistently, divert funds to the districts/regions that are performing as per established targets with.
- iv. Examine proposals for partnerships with government departments/agencies and approve MOUs for execution of such partnerships;
- v. Ensure complementarity of ADP-funded own source and donor funded projects related to SCRП scope and activities in terms of geographic and beneficiary coverage;
- vi. Approval of Annual Work Plans, Budgets and Procurement Plans;
- vii. Review performance of PMU/Service Providers/ line departments under MOUs, against established targets and take remedial actions to keep implementation on track; progress against the work plans/budgets and take remedial actions where needed;
- viii. Approve the PIM as a guideline for project implementation and its periodic updating as needed;
- ix. Ensuring timely provision of counterpart funds (cash) and sufficient allocations for provincial ADP-funded projects that have been selected for leveraging under the project.

2. Project Management Unit (PMU)

36. A fully autonomous PMU for SCRP —along with three (3) District Coordination Units (DCUs) will be established under the administrative control of Provincial Planning and Development Board (P&DD), government of Sindh. PMU will be responsible for all aspects of project execution including operations, finance, procurement, human resource, and M&E.

37. PMU will be administratively linked to P&D Department but accountable for its work and performance to Project Steering Committee (PSC). Following are the major responsibilities of PMU;

- i. Project planning, implementation, monitoring and coordination with the participation of all implementing partners and stakeholders.
- ii. Close coordination and liaison with PIUs of ADB financed components in irrigation, drainage and forestry to ensure geographical alignment and complementarity between IFAD and ADB investments to achieve enhanced impact.
- iii. Preparation of the consolidated AWPB and the associated procurement plan (PP); once the AWPB and PP is approved by PSC and cleared by IFAD, the PMU will have full financial and administrative authority to ensure its efficient implementation.
- iv. Quarterly and monthly plans preparation and progress reviews, in consultation with all implementing partners for project implementation.
- v. Conduct of financial, accounting, procurement and administrative management, including for activities carried out by service providers and public agencies.
- vi. Procurements and contract management including bulking of all common equipment vehicles etc. for procurement in an efficient manner
- vii. Development of comprehensive M&E Plan and conduct of monitoring and evaluation activities including impact assessments.
- viii. Design and establishment of a MIS to assist management decision-making and progress tracking.
- ix. Procurement and installation of an IFAD approved Accounting Software to accurately track expenditures and prepare withdrawal applications.
- x. Preparation of detailed quarterly and annual physical and financial progress reports for submission to Government and IFAD as per prescribed timelines
- xi. PMU staff and partner implementing agencies staff capacity building training in project approach, processes and outputs and outcomes
- xii. Promotion and development of team building among all partners and ensuring discipline within PMU and among implementing partners
- xiii. Establishing systems for transparent operations, prevention of corruption and achieving value for money through efficiencies and competitiveness
- xiv. Preparation of the Project's communication strategy and dissemination of information about the project rationale, concept and detailed content to the stakeholders and all interested parties.
- xv. Development of a KM strategy to guide conduct of periodic evaluations and impact assessments of project activities to assess quality and relevance of interventions, their impact on beneficiary incomes and intended outcomes, sharing of lessons and results through appropriate media.

- xvi. Establishment and maintenance of linkages with government departments and agencies, donors, private sector partner organizations, social mobilization partners, and the community organizations.
- xvii. Operation of the management information/reporting systems and the results monitoring framework, and regular reporting to the development partners.

3. PMU Structure and Staffing Positions

38. PMU will be headed by a Project Director, selected by a selection committee constituted by Chairman P&D, following a competitive process from within Provincial Management Service (PMS) or Pakistan Administrative Service (PAS). The selection criteria shall include seniority, qualifications, and relevant experience. District Coordinators for the three (3) District Coordination Units (DCUs) will also be selected by same selection committee through a competitive process from the PMS or PAS as appropriate. The DCUs shall provide field level coordination and monitoring. Each DCU shall have a small complement of management and technical staff.

39. The PMU/DCUs will have sufficient technical and administrative staff to perform their roles effectively. The organizational chart and suggestive Job Descriptions/TORs of key positions are provided at **Annexure-1: Organizational Chart Job Description of Key Positions**.

40. Though administratively attached to Planning & Development Board, the PMU will be accountable for its performance to Project Steering Committee headed by the Chairman, Planning and Development Board.

41. PMU shall have a dedicated FM Section headed by Finance Manager for the management of project budgets and finances. A Budget and Finance Assistant will be placed in each DCU to assist the District Coordinator in monitoring and coordination of project funds utilization by implementing partners i.e., SMPs, and extension service providers.

42. Separate assignment accounts will be maintained for IFAD and Government funds as per the corresponding regulations and guidelines. Annual Audit of project accounts would be carried out by Auditor General of Pakistan within three months of end of Financial Year and Audit report will be furnished to IFAD within six months of close of financial year. Detailed guidance on financial management has been provided separately later in this document.

II. PLANNING, MONITORING AND EVALUATION SYSTEM

A. Planning

43. Based on Project PDR and PC-I, and indicative phasing contained therein, Annual Work Plans and Budgets will be the main instrument for project implementation. PMU will be responsible for leading the AWPB formulation process in a participatory, bottom-up manner. The AWPB process will be completed by 31 March each year and got approved from Project steering Committee and IFAD by 30 April. For efficient planning and monitoring during the year, the AWPB will be organized around four quarters of the year with targets and budgets reflected for each quarter.

44. The Annual Work Plan and Budget (AWP&B), will be the main tool for planning project activities, monitoring and progress reporting. The logframe will provide the direction and overall framework for each year's work plan and budget. The AWP&B will be approved by PSC and cleared (non-objection) by IFAD before execution. The AWPB, based on the PDR's indicative phasing and budget allocations will adhere to the overall thresholds for various categories agreed under financing agreement. The PDR phasing, targets and estimated costs for each activity, especially those related to community level interventions, will be treated as indicative and actual targets will be determined every year on the basis of ground realities.

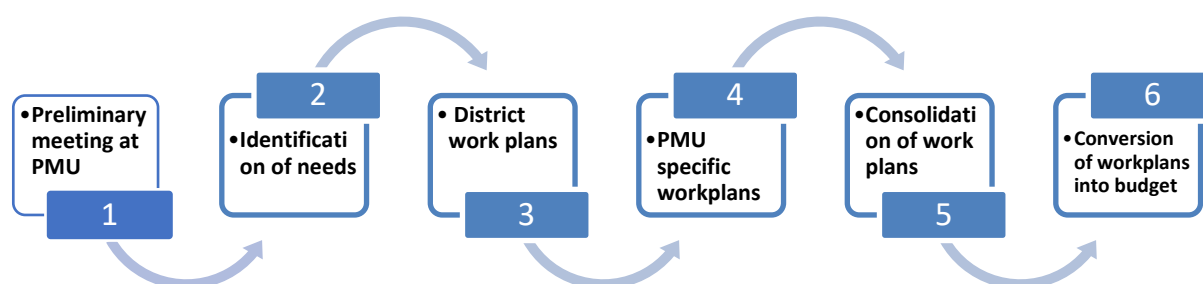
45. The AWP&B will be organized around the three project components and related sub-components. IFAD’s template for AWP&B will be used which will have both quantitative targets, its phasing by quarter and narrative explaining the intervention approach/strategy. The AWP&B will also identify pertinent potential issues and mitigation strategies so that early actions can be planned to avoid under achievements. A biannual review will be carried out at least during the first two project years and if necessary, AWP&B may be revised accordingly. Preparation of AWP&B will be done in a participatory manner involving the key implementing units of the project including regional offices, implementing partners, collaborators and relevant government departments.

46. Each year’s work plan will be finalized in the last quarter and approved by PSC and IFAD at least 60 days before the start of implementation period. Technical planning of the project interventions will be based on initial value chain prioritization (nutrition-sensitive), job market study and outlook and a series of market appraisal linked to VO/Interest Group business plans.

B. Planning Process/AWP/Budgets

47. AWP&B will have two streams of contributory processes. One stream will relate to VO/Interest Groups based value chain/agribusiness development and supportive community and value chain infrastructure which will be guided and coordinated by social mobilization partners through their value chain and community infrastructure specialists, facilitated by the social organization staff. The value chain specialists will be responsible for selection of promising value chains and prepare business plans for each interest group through rigorous community participatory approach for each interest group for approval of PMU. Second stream will be for creation of productive employment and self-employment opportunities for rural women and men from BISP beneficiary families in target VOs in the farm, off farm and non-farm sectors through competency-based trainings, conducted by STEVTA and private sector TVET service providers (for subjects for which STEVTA doesn’t have the requires courses/facilities or target beneficiaries do not have the qualifications for enrolment in STEVTA institutions. The job placement facilitation of successful trainees will be facilitated by TVET service providers on the pattern already established in Southern Punjab Poverty Alleviation Project and National Poverty Graduation Programme.

Following flow chart is illustrative of AWPB formulation cycle:



Detailed guidance on AWPB has been provided in FM Manual.

C. Project Baseline

48. At the start of the project, a survey will be commissioned to third party by PMU to establish a baseline for key results and outcome indicators (referring to the log frame) as well as the intended impact and transformation pattern of the rural economy through SCRIP interventions. Specific outcome indicators related to IFAD’s mainstreaming themes of nutrition, youth inclusion and climate change resilience are included. Baseline and subsequent project progress reporting will be disaggregated on the basis of gender, age, sectors, regions and professions (for component 2). Given the unique nature of project interventions (i.e., VO led value chains, 4Ps, subsidized credit provision and job market integration of poor BISP families and youth), the project will develop and update a rolling

baseline/database for beneficiaries as they join the project. A control group will be identified during the baseline.

D. Quarterly Plans and Reviews

49. PMU will organize quarterly and annual progress review and planning meetings/workshops, based on progress reports furnished by all implementing partners. These review meetings will be held before the end of a quarter to review progress, identify challenges and shortfalls warranting attention, and hence action plans will be developed for the next quarter, based on agreed solutions. All notified Activity Managers/Focal Persons of the departments and social mobilization partners and PMU technical staff will participate. At the end of meeting, the PMU will formally issue a quarterly work plan containing next quarter targets and financial allocations for each of the components and implementing partners. Proceedings of the meetings will be minuted covering issues discussed and decisions made.

E. Annual Progress Review and Planning Meeting

50. PMU will organize annual planning and review meetings in the last quarter of financial year to review progress and pertinent challenges/issues in project implementation during on-going year. Based on consultation a plan for the next financial year will be formulated.

F. PSC Meetings

51. PSC will meet twice a year for a mid-year review and an annual review and AWPB approval for next year. PSC may convene additional ad hoc meetings to decide on any issues of importance affecting project progress. The meetings will be based on agenda prepared by PMU and containing issues and proposals on which PSC decisions are sought. Minutes will be prepared and issued following each meeting.

G. Monitoring and Evaluation

52. The scope of Monitoring and Evaluation in SCRP will be timely collection of reliable data and information for measuring performance and progress related to physical progress against project development objective, outcomes, outputs, and impact in terms of the project's logframe indicators. M&E will serve as key learning tool to provide timely and quality information for critical reflection on project strategies and operations to support decision-making.

53. Using the project AWPB and Log Frame as key performance benchmarks, the M&E system will provide project management, the Government and IFAD with reliable and timely information on project execution performance and results, and to ensure efficient and effective project implementation. The M&E system will aim at monitoring: (i) monitoring project execution which essentially means the regular tracking of activities and output targets as identified in the AWPB and project logframe, (ii) monitoring outreach i.e. the number of people directly benefitting from project interventions disaggregated in terms of gender and age; (iii) measuring and evaluating project results ; and, (iv) benchmark risks and assumption against those critical assumptions identified in the Log frame. BISP PSC data will be used as a benchmark to track progress of poverty graduation of beneficiaries including income, and dietary diversity/nutrition.

54. Standardized templates will be developed for data collection and reporting and included in the contracts/MOUs with implementing partners. While field progress monitoring will be largely led by IPs, The PMU and DCU monitoring staff will conduct field visits, based on monthly M&E Plans, to verify the data submitted by the various IPs and monitor the quality of delivered outputs. Such field visits shall also provide an opportunity to interact with beneficiaries, assess their satisfaction with services received or document stories from the field.

55. The PSC and IFAD's supervision missions shall also periodically assess project implementation—including the effectiveness of M&E system in tracking and resolving implementing bottlenecks at IPs, PMU, and DCUs levels.

56. The system will be guided by IFAD's Corporate Results indicators, and mandatory indicators pertaining to mainstreaming priorities. M&E data for key indicators will be disaggregated as applicable. A detailed M&E plan will be developed during the first six months of project implementation, as part of the updated PIM, which would provide the basis for annual M&E plans and activities. Orientation sessions and mandatory trainings will be conducted for the regional M&E personnel and staff of partner organisations.

57. A database developed at the baseline study stage will be updated annually. Using data from project M&E, the logframe will be updated on annual basis and shared with IFAD and PSC. The updated logframe will be used by PSC for the project review. The overall responsibility for the M&E activities will lie with the PMU with support roles at the district office level. The M&E will integrate the functions of knowledge management and communication.

58. An annual M&E plan, as part of project's overall AWPB, will be prepared by M&E wing of PMU, with inputs from all implementing partner on targets, formats, processes and reporting responsibilities and then each agency, including PMU, will derive their individual plans to meet the requirements of annual M&E Plan. The M&E Plan shall focus on tracking activities vis-à-vis the project's approved logframe.

59. The activity and output monitoring by PMU will focus on spot-checking, verification of output data reported by IP, identification of risks factors and propose mitigation measures, status of utilization of funds by IP against the disbursements, ensure compliance to the financing agreement, efficiency of funds flow mechanism, evaluation of internal control system etc. During joint activity and output monitoring visits, the monitoring team will randomly interview the target beneficiaries; oversee the input delivery process and review procurement, disbursement, training record, beneficiaries' acknowledgements record and project database maintained by the IP.

60. The process and outcome monitoring shall be carried out by PMU M&E Specialist to ensure independence and objectivity of the outcome and process monitoring. The key activities related to process and outcome monitoring include; process and outcome monitoring visits to the IP, management of annual PSC surveys for economic graduation tracking by IP, annual outcome surveys in line with IFAD's requirements including third party validation of PSC survey conducted by IP, mid-term and end-term project evaluations and value chain studies.

61. It will be the responsibility of PMU to maintain/update data of key monitoring indicators. The M&E system will use geotagging and web-based interface so that reports are available in real time. The database will use design that can easily be aligned with the Government/P&D monitoring and reporting structures. Post MTR, the Planning and Development Department will undertake one or several evaluation studies to assess relevance, effectiveness, efficiency, sustainability and exit strategy at the entire project level as well as the specific interventions. IFAD will undertake annual supervision, implementation support and mid-terms review Missions as well as ad hoc assessments necessary to improve project performance.

H. Participatory Monitoring and Evaluation (PME)

62. Target beneficiaries, implementation partners, participating farmers and 4Ps as well as trainees under component 2 will be actively involved in monitoring and evaluation of project activities through regular project monitoring and review meetings, field visits, surveys/Focus Group Discussions, and spot checking. A systematic plan to ensure active involvement of farmers engaged in value chain plans and 4Ps and trainees shall be developed in line with the overall M&E plan. Furthermore, annual project

review consultation and lessons learned workshops at provincial level will be held to engage Government institutions, IPs, and other stakeholders in project progress review and monitoring process.

I. Economic Graduation Tracking - Methodology and Process

63. As part of process and outcome monitoring, SCRП would systematically track economic graduation of the target beneficiaries through core and corresponding logframe indicators; increased incomes, increased income of smallholder farmers who are members of interest groups and 4Ps, enhanced incomes of beneficiaries of productive assets, and youth trained for employment/self-employment and micro enterprises. Baseline data compiled through baseline survey will be the basis to track the change in economic status of participating beneficiary smallholder farmers, trainees of different trades, and youth being integrated into different job sectors. The evaluations will be through annual economic graduation surveys, sample validation of village organizations results and mid-term and end of project evaluations managed by PMU. The SCRП will use baseline survey data as benchmarks to measure improvements under value chain activities, economic graduation approach and improved nutrition and food security status among target population. The PMU would explore avenues of collaboration with Impact Atlas to build synergies between its own tech-based monitoring and reporting systems with that of Impact Atlas to enhance effectiveness and efficiency in economic graduation tracking for REPT.

64. Social Mobilization Partners would be actively involved in annual economic graduation updating survey by the PMU post MTR. The findings of the annual surveys would be shared with implementing partners and 4Ps partners for validation of the findings. The lessons and success stories with potential for scaling up and replication will be shared with key relevant government departments and relevant wings of P&D Board as an input for targeted interventions for the ultra-poor and the poor in their respective spheres.

J. M&E Personnel

65. M&E Wing: PMU M&E Wing will consist of following staff (tentative):

- i. M&E Specialist (1)
- ii. M&E Officers (1+3)
- iii. Communication and KM Specialist (1)

66. The M&E Specialist will supervise the team and will manage the surveys, studies, policy papers and impact evaluations conducted through external consulting such as baseline survey, mid-term and end of project evaluations, and thematic studies. The team will work in close collaboration with all sector specialists to provide timely input to the PMU team regarding project progress updates and outcomes. The team will coordinate in customization of SCRП's MIS reporting requirements and will provide orientation and technical backstopping to the IPs for smooth, efficient, and timely progress data entry and reporting. M&E Specialist along with the team will also oversee development/customization of mobile application/geotagging and provide time-to-time technical backstopping in efficient and effective management of the mobile application for real-time monitoring by IP and PMU staff through smart phones and tablets.

K. Environment and Climate, Gender, Nutrition and Youth strategy

67. IFAD's four corporate mainstreaming themes, Environment and Climate, Gender, Nutrition and Youth will be mainstreamed into all aspects of project implementation and appropriate strategies will be adopted to ensure that all project interventions contribute to attainment of desired outcomes. GOS, NGOs, FAO and WFP have initiated, over the years, a number of programmes focused on these aspects with wealth of lessons. SCRП design and interventions aim to cover 40 percent women among

beneficiaries and 30 percent youth, promote gender equality and women's empowerment, improve community nutrition, and seeks to strengthen climate adaptation and resilience.

68. To this end, five thematic pathways have been designed, aiming at providing guidance for PMU and Implementing partners.

1. Overall Environmental, Social and Climate strategy

69. The high degradation of ecosystems in Sindh raises the vulnerability to climate change of smallholders. Natural buffers to climate hazards are affected (coastal, riverine and inland forest, poor quality and salinisation of soil, poor quality and quantity of water for irrigation). This situation explains the ADB contribution to SCRП and the financing of drainage systems restoration (grey infrastructure), as well as mangrove forest and inland forest restoration (green infrastructure)⁷. It is key that smallholders and households, in these areas, adopt sustainable practices in agriculture and social activities (including woodfuel for example) and participate in the maintenance of the new grey/green infrastructure facilities. It is also key to consider the economic and social dependence of smallholders vis-à-vis landlords and middlemen, and young people and women vis-à-vis men to reduce the vulnerability of all disadvantaged groups, improve nutrition and adapt to climate change.

70. Therefore, the IFAD supported project should be clearly connected to the ADB supported project (in terms of target areas and communities, as well as local development plans). Indeed, beyond the expected coordination between the two PMUs, it is key that the activities of the two projects are based on the same principle of community involvement and consistent adaptation activities through a system approach, including youth inclusion, GEWE and Nutrition.

71. The three components of the IFAD supported project should clearly include in their objectives and activity plan: Youth inclusion, GEWE, Nutrition, Climate adaptation and Environment preservation. In other words, how Transformation of Rural Agriculture and Fisheries Production Systems, how Economic Graduation of Landless Poor; how Policy Support, can each contribute to Youth inclusion, GEWE, Nutrition, Climate adaptation and Environment preservation. The following pathways are intended to guide the PDR design and project implementation.

2. Climate adaptation pathway

72. The Climate adaptation pathway under SCRП is to achieve the IFAD target in terms of Climate Finance. Therefore, the project aims to programme at least 40 percent of the budget dedicated to climate adaptation.

73. Based on the severe context of Sindh, where smallholders are highly vulnerable to shocks because of (1) a strong economic and social dependence on landlords, boat owners and middlemen, (2) heavily degraded ecosystems and (3) climate change and increasing climate hazards, the pathway of SCRП for climate adaptation could be based on the three following streams:

- (1) Adopting adapted production and practices in agriculture, fisheries and aquaculture
- (2) Climate proof investments and equipment
- (3) Ensuring an efficient and consistent linkage with the ADB-supported SCRП

3. Adopting adapted practices and production in agriculture, fisheries and aquaculture

74. Mobilizing Village Organizations (VOs), thematic interest subgroups, landlords and service suppliers on Climate Change and providing extension service [Component 1]: Traditional, top-down and technology-driven approaches, commonly used so far in Sindh, should be avoided and more

⁷ The purpose is to restore ecosystem services and the water cycle circulation in Sindh.

participatory systems should be fostered. Therefore, VOs and subgroups should be supported to think about the climate trends they can observe, the links between climate vulnerabilities and degraded ecosystems, their own vulnerability, and their room for adaptation. Value Chains (VCs) development plans need to be evaluated and adjusted by farmers, fisherfolks, and support organizations, based on climate sensitivity and ecosystems context. Women and youth should benefit from the same kind of sensitization to analyze development plans through the lens of climate change impacts, climate risks and adaptive strategy.

75. Farm advisory services should be provided in Climate Smart Agriculture, agroecology, integrated pest and disease management, salinity management, water management, emphasizing the links to improved productivity. Appropriate transformation should be suggested and supported in the fishery sector: management feed, brackish-water aquaculture systems, hatcheries technics, cultivation of aquatic plants for consumption, animal feed or energy, integration of aquaculture with agriculture, adapted equipment such as flood-prove landing sites and low-cost fish aggregating devices (FADs), adaptation post-harvest management. Farmer field schools, and when appropriate, Participatory Development Technology (PDT) seem to be relevant options for efficient adoption (as well as equivalent participatory training in the fishery sector). If needed, training courses can be organized for rural people to understand basic information related to agro and marine meteorology and concrete impacts for them at field level (including livestock and fish) to support decision making and anticipation.

76. As they have a key role in agriculture, both in terms of food production choices and land management, landowners should also be targeted with adapted packages. Similarly, awareness raising on climate adaptation of input suppliers, traders and financial service providers (including boat owners and traders in the fishery sector), on which smallholders depend, is key to design and adapt these services, and foster transformation.

77. To do so, **community support organizations and extension services**⁸ in the three districts must have sufficient skills and know-how on climate vulnerability and climate adaptation options (Climate Smart Agriculture, agroecology, and sustainable fishery) [Component 1]. A particular attention should be paid on female staff to support women households and female farmers. Prior learning and skilled officers in Badin district, supported under the GCF/FAO project “Transforming the Indus Basin with Climate Resilient Agriculture and Water Management - TIBCRAWM”⁹ should be identified and considered for training provision. Any other project/programme in or near the three districts, addressing climate risk in rural areas, could be hired similarly, as well as services of capable training institutions and universities to meet the desired capacity building needs.

78. A set of techniques and approaches derived from Climate Smart Agriculture, Agroecology, and sustainable fishery can be promoted, tested and implemented [Component 1]. They may contribute to diversify and reinforce ecosystems (including soil), reduce water needs and improve water availability, and provide new services. They can address specific sectors such as aquaculture, food processing or agriculture on saline soil. They all contribute to reducing exposure and sensitivity to climate hazards. It is very important for SCRIP to provide training and support, for all the project target groups, including women and youth, if needed through appropriate vehicles (such as women only training groups). These supports should also be provided taking into consideration the initial situation and problems farmers including women and youth) are facing, as well as their economic background and production costs (at the short and long term). Several examples, provided by the Target Adaptation Assessment can be listed below.

⁸ Extension services from the Agriculture Extension and Research Department, the Livestock and Fisheries Department and the Sindh Irrigation And Drainage Authority, with coordination among them.

⁹ TIBCRAWM has been implemented by FAO in several district in Punjab and Sindh, among them Badin <https://www.greenclimate.fund/project/fp108#overview>

<p>Agro-ecosystem diversifying and good practices</p>	<ul style="list-style-type: none"> ● Selection of species (animal and vegetable) more adapted to the environment (water needs, extreme hot temperature, soil salinity, short cycle varieties) for food or feed production (meeting existing or new market) and equivalent in fishery sector ● Maximizing plant, soil and animal biodiversity and interactions to reduce diseases and pest outbreaks, manage soil fertility, diversify income resources and improve nutrition ● Providing soil cover (mulch, cover crops), manure and compost to supply nutrients, and enhance functions of soil biota and plant roots, and increase the soil water holding capacity ● Producing bio-pesticide and implementing biocontrol ● Implementing preventive animal health programme ● Promoting freshwater aquaculture for inland fisherfolk and brackish-water aquaculture systems on flooded and/or salinized land and water bodies for coastal agro-communities
<p>Water management optimization</p>	<ul style="list-style-type: none"> ● Developing field laser leveling, raised bed agriculture, sowing seed with drills and adequate soil preparation, small irrigation channels improvement, water harvesting and storage system ● Developing water harvesting and storage system, and irrigation scheme
<p>New services</p>	<ul style="list-style-type: none"> ● Promoting Contract farming ● Offering climate insurance products ● Developing agrometeorological services, including day-to-day weather observations and decision-making tools using mobile technologies ● Marine meteorological service for fisherfolks
<p>New equipment</p>	<ul style="list-style-type: none"> ● Developing animal shelter ● Fodder storage facilities ● Food storage facilities and food transport equipment ● Appropriate gear for boats and low-cost fish aggregating devices (FADs) ● Skills and tools for self-maintenance

79. **Stakeholder dialogue is key for lasting transformation** [Component 1]. For good appropriation and implementation of new techniques/services/equipment, smallholders must be involved in the design and decision of such options, as part of the expected sustainable Value Chain plans. Women and young people must be included as they bear part of Climate Change burdens and risks. Existing solutions, implemented with success, will be identified (in or near to the three districts) to support training and peer exchanges. Stakeholder coordination is needed with landlords (for sharecroppers to invest in land, adopt appropriate crops or develop agroforestry) and suppliers of input or services throughout the project.

80. **Circular economy and green jobs should be promoted** [Component 2]. To reduce dependence of smallholders and rural economy to suppliers of food, feed and inputs, as well as to improve their agency and nutrition, and develop local richness and jobs, SCRCP could seek to support local production for the local markets. Production of biopesticides, compost, tree plant, fry or fish feed, are promising options to meet the demand of possible Value Chain plans. Production of fresh and processed food can meet the demand for nutritious food. Equipment for production, transformation, storage and

distribution as well as new skills are needed. The aim is not to make the districts independent from any supply, but to reduce their vulnerability, diversify income generation, and thus adapt to climate change.

81. A **call for innovation [Component 3]** should be launched to explore and trigger new approaches and solutions, involving smallholders, facilitating their connection to new markets and partners. Based on local assets and context, this call could be focused on the mainstreaming themes: Climate adaptation, GEWE, youth inclusion and improved nutrition.

4. Climate proof investments and equipment [Component 1 and 2]

82. All equipment and investments provided by the project should meet the minimum requirement to last in the climate context of Sindh, in particular to cyclone, extreme hot temperature and floods. It must be the case for investment (such as roads to connect coastal areas to market places, animal shelters, landing sites for fisherfolks, irrigation schemes, water drinking facilities) as well as equipment provided to farmers or young people developing their business. Procurement would have to be designed accordingly.

5. Ensuring an efficient and consistent linkage with the ADB-supported SCRP [Component 3]

83. ADB-supported SCRP will provide key infrastructures for climate adaptation of rural communities, in terms of improved drainage systems as well as mangrove and inland forest restoration. Lasting impacts of these investments suppose a robust smallholder engagement in the design, the carrying out, the maintenance and the proper operationalization of existing and new assets.

- One approach is to base Value Chain plans, job and service creations on these green and grey investments.
- Project targeting, PMUs/CDUs coordination and anticipation of implementing agencies would be key, as well as the information and mobilization of smallholders and communities.
- In addition, a consultative group, bringing together scientists from Pakistan (from CGIAR, local research centres and universities, if possible with a good knowledge of Sindh) as well as senior and field officers from GoS (agricultural department, livestock and fish department, irrigation authority) and NGOs could orient and guide project implementation.

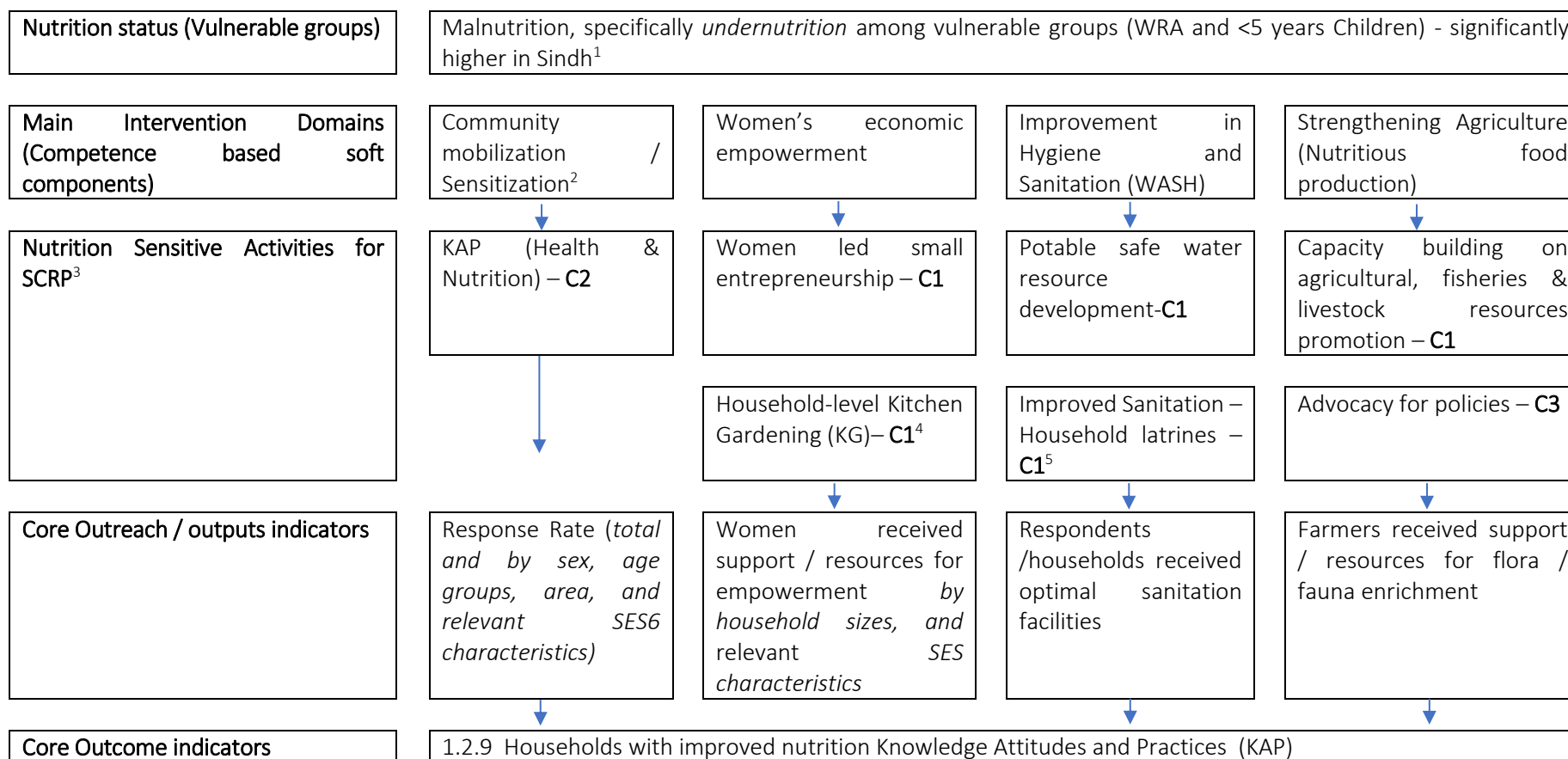
L. Nutrition pathway

84. Women of reproductive age (WRA), children (especially <5 years), and adolescent girls are more prone to nutritional inadequacy in the developing world including Pakistan. The Sindh province continues to experience high rates of malnutrition among these nutritionally vulnerable segments of population due to a number of reasons such as poverty, natural disasters including drought and floods and lack of awareness. The key malnutrition issues include but are not limited to stunting among children (<5 years), wasting, iron deficiency anemia and other micronutrients deficiencies in children, adolescents and WRA.

85. The SCRP project is aimed to contribute to the achievements of the sustainable development goals (SDG), specifically targeting poverty alleviation, improving food security & community nutrition in a gender, youth, and climate change sensitive manner through nutrition sensitive interventions.

86. The Project has multiple workable pathways to mainstream nutrition intervention in the target population particularly WRA, teenage girls and children (<5 years). Based on literature evidence and reports of the completed programs in rural Sindh particularly, following nutrition sensitive interventions are proposed; their hierarchical and sequential statuses are visually displayed in the organogram:

Nutrition Sensitive Interventions (SCRP)



¹ NNS 2018; details of malnutrition situation in the target areas are reported under the section 2.1 (f) in the PDR SECAP Review Note

² Mobilization of the community on agriculture & livestock promotion, health and nutrition, diversified foods consumption, healthy dietary patterns, improved livelihoods etc.

³ Suggested nutrition sensitive activities are aligned with the IFAD Social Inclusion theme criteria. These nutrition sensitive activities are suggested for SCR based on their climate resilience values, performance and implementation capabilities, cost effectiveness, and community needs.

⁴ Recent success in the context of KG came from Sindh Irrigated Agriculture Productivity Enhancement Project – SIAPEP (completed Jan 2023), that implemented and successfully established **3100** kitchen gardens through IP NGOs in rural areas of 15 districts of Sindh (report available: https://www.srso.org.pk/reports/PCRs/PCR-SRSO-SIAPEP%20Updated_compressed.pdf accessed 09/02/2024)

⁵ Aligned to the Sindh Sanitation Policy – 2017 (<https://phenrd.sindh.gov.pk/storage/notification/aq1z2GjHZIF35QjlokrLdY8U2xka1abxE1QCR16v.pdf>) that aims to provide better sanitation service and to make sure that the entire population of Sindh has access to a safely managed sanitation service and sanitary environment that is also **Nutrition sensitive and hygienic**. Some completed programs such as Chief Minister’s Accelerated Action Program and Saaf Suthro Sindh addressed nutrition through improving dietary diversity, sanitation and hygiene practices in the targeted districts

⁶ *socioeconomic*

87. The following are the nutrition sensitive pathways integrated in the SCRP project components and themes with the expected positive impact in terms of sustainability, behaviors change and practice:

Nutrition Sensitive Activity	Beneficiaries	Prospective pathways	Expected outcomes
C1: Strengthening Agricultural & livestock resources.	Small poor landholders farmers / ultimately WRA and children	<ol style="list-style-type: none"> 1. Provision of context appropriate seeds, and other tools for cultivation 2. Capacities building of the farmers (particularly youth) to promote the cultivation of variety of crops / livestock farming that are organic, climate smart and resilient to promote household food security and nutrition. Local nutritious species to be priorities. 3. Value-Chain Support livestock resources through technical assistance such as <ul style="list-style-type: none"> ●Public programs aimed at raising awareness about sustainable and ethical livestock farming practices. ●Value chain support infrastructure such as farm to market roads improvement to access market. ●Promote rearing poultry particularly Layers at household levels through net cages construction and initially fowl and their feed provision. 	<ol style="list-style-type: none"> 1. Enhance food productivity and availability at household level that enable the vulnerable groups (particularly WRA and children and adolescents) to get: <ul style="list-style-type: none"> ●Diversified foods from own resources from all food groups. ●Suitable complementary feeds for children (dairy foods, and eggs to improve children’s growth and development through getting quality protein and micronutrients) ●Income / revenue generation for the livelihood
C3: Supportive-Policies dialogue on small scale farming	Small poor landholders	<ol style="list-style-type: none"> 1. Advocacy for policies that favor small-scale farmers, including regulations that enable fair access to resources and markets. Additionally, risk mitigation programs to help farmers cope with unexpected challenges, such as weather-related disasters or disease outbreaks. 	

C1: Women’s economic empowerment through agro-enterprise development and capacity building in vocational/first hand skills	WRA	<ol style="list-style-type: none"> 1. Establishment of women led entrepreneurship such as community based solar backed / powered poultry egg hatchers. 2. Establishment of resource centers for strengthening skills in food value addition (processing, drying, pickling etc) & kitchen gardening to improve food diversity in addition to revenue generation through technical and vocational training such as handicraft etc. 	<ol style="list-style-type: none"> 1. This contributes significantly in raising the overall life quality and nutritional status of the target groups through: <ul style="list-style-type: none"> ●improve food security particularly accessibility to high quality cost-effective and diversified food commodities (with complete / quality protein to the vulnerable groups) at household level. ●better livelihood by revenue generation and capacity building in food value addition, agro-enterprise development and other resources
C1: Capacity building in food value addition and agro-enterprise development	WRA / youth		
C1: Potable safe water resource development and optimization	All Community members including vulnerable groups	<ol style="list-style-type: none"> 1. Installation of solar-powered tube-wells / pumping machines in the ultra-poor community where clean drinking water is scarce or totally unavailable. 2. Optimize or construct latrines at household levels in the ultra-poorest communities to eradicate open defecation [CA2] 3. Community behavior change communication (BCC) awareness to promote the significance and importance of using toilets and discourage open defecation 	<ol style="list-style-type: none"> 1. This is a sustainable and cost-effective solution for providing access to clean water. It will Improve community access to clean water and sanitation facilities to prevent waterborne diseases and enhance overall health and nutrition. In conclusion, improved community nutrition by minimizing the potential infections such as Diarrhea, worms’ infestation, Pneumonia and other water born disease will be the ultimate outcome. 2. Eradicating open defecation in poor communities is essential to promote overall hygiene that has a strong and immediate impact on community
C1: Sanitation promotion			

			health and nutrition status.
C2: Capacity building (health, nutrition and personal hygiene)	All Community members including vulnerable groups. Additionally, other stakeholders as well such as workers and health services providers from health department, workers from education department and municipality related people including local government and NGO working there in the field	1. Development of gender and age-based knowledge, attitude and practices (KAP) modules that cover health, nutrition and personal hygiene and designing community training programs to impart KAP through the trained facilitators. Community facilitators will be trained through ToTs. This should be based on a Social and Behavioral Change Communication SBCC assessment to develop the methodologies for nutrition education and gender equality.	1. Capacity building in nutrition knowledge, attitude, and practice is crucial for: <ul style="list-style-type: none"> ● promoting healthy behaviors, lifestyle, and nutrition status ● preventing malnutrition, ● and improving overall well-being

M. Youth inclusion pathway

88. The project is directly linked with the first Development Goal (Economic Empowerment of Youth) of the Sindh Youth Policy and its three Strategic Objectives: SO 1.1 Enhancing Employment and Livelihood Opportunities among Youth; SO 1.2 Human Capital, Education and Skills Development of the Youth; and SO 1.3 Skills Development and Vocational Training.

89. The project has different pathways to support the economic empowerment of poor rural young people in Sindh. Some of the identified pathways (for the different sub-groups) are:

Sub-group	Project Activities	Expected outcomes	Potential trajectories
Poor Young Farmers (male and female)	C1. Involvement in village participatory assessment	By participating in the village assessment, their voice within their communities is better heard, and their capacity to engage with authorities outside the community is strengthened.	<p>Productive trajectory: By improving their access to good TA and training, acquiring affordable finance that allows them to break with their dependency to high-rate informal loans and having better value-chain infrastructure, the productivity, marketing and sustainability of their productions improve, increasing their income and resilience. This is supported by improved land agreements that reduces uncertainties and improves the quality of the investments made and the adoption of more sustainable practices.</p> <p>Diversification trajectory. By the presence of a more innovative context and more attention provided to more sustainable practices, farmers diversify their production, adopting innovative practices and crops, resulting in more sustainable and resilient livelihoods, increasing also the overall resilience of their areas.</p> <p>Political empowerment trajectory: By participating in the village assessment and interest groups, their capacity to engage in</p>
	C1. Strengthening of TA providers capacities (indirect)	The access to good TA improves, increasing their access to knowledge and support by the Government and other service providers, resulting in better and more sustainable practices.	
	C1. Participation in Interest Groups C1. Targeted training (e.g. production, business management, marketing) C1. Access to affordable finance	The Farmers access to trainings and affordable financing or get benefitted from the investments of the interest groups. By participating in the trainings offered, the management of their productions improves. The dependency of informal loans is reduced and the new investments allow to improve their practices and productive assets, or to add value to their production and improve their market access. As a result, their income and the sustainability of their livelihoods improves.	
	C1. Access to value-chain support infrastructure	Improved roads, market facilities and other value-chain infrastructure allows farmers to process or sell their products better and increase their income.	

Sub-group	Project Activities	Expected outcomes	Potential trajectories
	C3. Policy dialogue on land access (indirect)	Improved land tenure agreement leads to better consideration of climate adaptation and ecosystem services by rural farmers. Their capacity to do long-term investments improves, increasing their assets and income in the long-term	political discussions with higher authorities increase, increasing the investments and the political attention to their particular challenges
	C3. Alternative livelihoods funding through the Challenge Fund (indirect)	The agriculture sector in Sindh and its value-chains present alternative opportunities with proven economic return, social benefits and adaptation capacity to climate change and environmental threads. Innovative young farmers can tap into those alternative products and productive and processing practices, improving the long-term economic and environmental sustainability of their livelihoods.	
Poor Young Fisherfolks (male and female)	C1. Participation in village participatory assessment	By participating in the village assessment, their voice within their communities is better represented, and also their capacity to engage with authorities outside the community	<p>Productive trajectory: By improving their access to good TA and training, acquiring affordable finance that allows them to break with their dependency to high-rate informal loans and having better value-chain infrastructure, the reduced costs, marketing and sustainability of their productions improve, increasing their income and resilience.</p> <p>Diversification trajectory. By the presence of a more innovative context and more attention provided to more sustainable practices, and</p>
	C1. Strengthening of TA providers capacities (indirect)	The access to good TA improves, increasing their access to knowledge and support by the Government and other service providers, resulting in better and more sustainable practices.	

Sub-group	Project Activities	Expected outcomes	Potential trajectories
	<p>C1. Participation in Interest Groups</p> <p>C1. Targeted trainings (e.g. production, business management, marketing)</p> <p>C1. Access to affordable finance</p>	<p>The fisherfolks access to trainings and affordable financing or get benefitted from the investments of the interest groups. By participating in the trainings offered, the management of their productions improves. The dependency of informal loans is reduced and the new investments allow to improve their practices and productive assets, or to add value to their production and improve their market access. As a result, their income and the sustainability of their livelihoods improves.</p>	<p>facilitated by the access to land, fisherfolks diversify their livelihood, adopt innovative practices, resulting in more sustainable and resilient livelihoods, increasing also the overall resilience of their areas and reducing the pressure over natural resources.</p> <p>Political empowerment trajectory: By participating in the village assessment and interest groups, their capacity to engage in political discussions with higher authorities increase, increasing the investments and the political attention to their particular challenges</p>
	<p>C1. Access to value-chain support infrastructure</p>	<p>Improved roads, market facilities and other value-chain infrastructure allows fisherfolks to process or sell their products better and increase their income.</p>	
	<p>C3. Policy dialogue on land access (indirect)</p>	<p>Fisheries communities have access to the land where they inhabit, increasing land security and enhancing investment at household levels and the development of alternative livelihoods (small livestock; backyard gardening).</p>	
	<p>C3. Alternative livelihoods funding through the Challenge Fund (indirect)</p>	<p>The fisheries sector in Sindh and its value-chains present alternative opportunities with proven economic return, social benefits and adaptation capacity to climate change and environmental threats. Innovative young fisherfolks can tap into those alternative products and productive and processing practices, improving the long-term economic and environmental sustainability of their livelihoods.</p>	

Sub-group	Project Activities	Expected outcomes	Potential trajectories
Landless, Unemployed and Ultra-poor Youth and Rural	C1. Participation in village participatory assessment C1. Strengthening of social mobilization partners (indirect)	By participating in the village assessment, their voice within their communities is better represented.	<p>Employment trajectory. By participating and accessing to vocational trainings that are better tailored to their needs and economic opportunities, and facilitated by a more dynamic rural areas and better rural infrastructure (indirect impact of the Investments of Component 1 and the Challenge Fund), they access to new or better job opportunities, increasing their income and nutrition (facilitated by access to water)</p> <p>Enterprise trajectory. By receiving resources to start small enterprises and skills training, they start small businesses -benefited also from the new value-chain infrastructure- that allows them to have a livelihood or diversify the household income and nutrition (facilitated by access to water)</p> <p>Diversification trajectory: By receiving basic productive assets (like small livestock) and skills trainings, and facilitated by better value-chain infrastructure and access to water, they</p>
	C1. Improved value-chain infrastructure (indirect)	Improved roads, market facilities and other value-chain infrastructure improves the job opportunities in Rural Sindh, allowing unemployed youth to access to jobs.	
	C1. Improved access to water through community infrastructure	The health and nutrition situation improves, as well as their families and children. New economic activities become available (e.g. small animals, backyard gardening)	
	C2. Strengthening of vocational training providers (indirect)	By starting small enterprises or accessing income generating assets, the ultra-poor diversity their incomes, increasing their resilience and their capacity to access food. The offer of skills and vocational training improves, allowing them to access to tailored training to the economic and job opportunities of their specific area.	
	C2. Transfer of income generating assets		

Sub-group	Project Activities	Expected outcomes	Potential trajectories
	C3. Skills and vocational training	After accessing to skills and vocational trainings, their livelihoods opportunities expand, both as entrepreneurs or as job-seekers. The diversification of income at the household level reduces the vulnerability of the poorest households and improves their capacity to afford nutritious foods, facilitated also by trainings on financial literacy.	<p>can acquire a new income source and improve their nutrition.</p> <p>Political empowerment trajectory: By participating in the village assessment and interest groups, their capacity to engage in political discussions with higher authorities increase, increasing the investments and the political attention to their particular challenges</p>
	C3. Alternative livelihoods funding through the Challenge Fund (indirect)	Rural Sindh improves its dynamism to innovate, generating new job opportunities for the landless, ultra-poor and jobless rural youth. These new opportunities are built into better principles of social inclusion and are more resilient than traditional opportunities. As a consequence, access to decent rural jobs becomes easier for young rural people.	
Poor young rural women	C1. Strengthening of social mobilization partners (indirect) C1. Participation in village participatory assessment	By participating in the village assessment, which is facilitated by social mobilization partners with a good understanding of gender issues, the voice of young women is better represented within the communities.	Productive trajectory: By improving their access to good TA and training, acquiring affordable finance that allows them to break with their dependency to high-rate informal loans and having better value-chain

Sub-group	Project Activities	Expected outcomes	Potential trajectories
	<p>C1. Participation in Interest Groups C1. Access to affordable finance C1. Targeted trainings (e.g. production, business management, marketing)</p>	<p>The young women that participate in interest groups (despite the existing barriers for their participation) access to affordable financing or get benefitted from the investments of the interest groups. By participating in the trainings offered, the management of their productions improves. All of these result in an improvement of their production and productivity, and access to markets, increasing their income and the sustainability of their livelihoods.</p>	<p>infrastructure, the productivity, marketing and sustainability of their productions improve, increasing their income and resilience. Their participation within their interest groups allows them to have more power within the decision-making process. This is supported by an improved application of existing land access laws that improves their access to land.</p> <p>Employment trajectory. By participating and accessing to vocational trainings (provided by organizations better prepared to address the existing gender gaps) that are better tailored to their needs and economic opportunities, and facilitated by a more dynamic rural areas and better rural infrastructure (indirect impact of the Investments of Component 1 and the Challenge Fund), they access to new or better job opportunities, increasing their income and nutrition (facilitated by access to water)</p> <p>Enterprise trajectory. By receiving resources to start small enterprises and skills training (provided by organizations better prepared to address the existing gender gaps), they start small businesses-benefited also from the new value-chain infrastructure- that allows them to have a livelihood or diversify the household</p>
	<p>C1. Improved value-chain infrastructure (indirect)</p>	<p>Improved roads, market facilities and other value-chain infrastructure improves the job opportunities in Rural Sindh, allowing young women to access to jobs.</p>	
	<p>C1. Improved access to water through community infrastructure</p>	<p>The health and nutrition situation of young women improves, as well as their families and children. The time spent dedicated to water collection is reduced and some new economic activities become available (e.g. small animals, backyard gardening)</p>	
	<p>C2. Transfer of income generating assets</p>	<p>Young women start their own small businesses or access to income generating assets. This improves both their economic position within their household and community, bringing also social empowerment. The diversification of income increase their resilience and food access.</p>	

Sub-group	Project Activities	Expected outcomes	Potential trajectories
	<p>C2. Strengthening of vocational training providers (indirect)</p> <p>C2. Skills and vocational training</p>	<p>Young women access to skills and vocational trainings that expand their livelihoods opportunities, both as entrepreneurs and as jobseekers. The economic empowerment improves gender equality at the household level. Expenditure in nutrition increases, facilitated also by trainings on financial literacy. The offer of skills and vocational training improves, allowing young women to access to tailored training to the economic and job opportunities of their specific area. The sensitivity of service providers to gender issues also brings benefits to young women not directly supported by the programme.</p>	<p>income and nutrition (facilitated by access to water)</p> <p>Diversification trajectory: By receiving basic productive assets (like small livestock) and skills trainings (provided by organizations better prepared to address the existing gender gaps), and facilitated by better value-chain infrastructure and access to water, they can acquire a new income source and improve their nutrition.</p> <p>Political empowerment trajectory: By participating in the village assessment and interest groups, and facilitated by the overall trainings received by them and their community that have incorporated a gender-equality approach, their capacity to engage in discussions within their communities and with higher authorities increase, reducing gender inequalities.</p>
	<p>C3. Policy dialogue on land access (indirect)</p>	<p>Improved implementation of existing land tenure legislation improves the access of young rural women to land, transforming the livelihood alternatives for young women in rural Sindh.</p>	
	<p>C3. Alternative livelihoods funding through the Challenge Fund (indirect)</p>	<p>Rural Sindh improves its dynamism to innovate, generating new job opportunities for the rural youth. These new opportunities are built into better principles of social inclusion and are more resilient than traditional opportunities. As a consequence, decent job opportunities for young rural women are more present in the area.</p>	

N. GEWE pathway

90. In line with the Sindh Gender Equality and Women’s Empowerment Policy (2020-2030) and IFAD’s three Gender Policy objectives, the key entry points for promoting gender equality and women’s empowerment through the project are: i) conducting gender sensitive social mobilization and addressing social norms which limit women’s participation in the project, ii) targeting activities and services to specific groups of women (age, socio-economic status and livelihood sector), iii) strengthening women’s decision-making role at community and organization level, and iv) promoting labour-saving technologies to reduce drudgery. The specific suggested pathways for the development of a gender strategy are described below:

GEWE pathway	Project activity	Potential trajectory	Suggested indicators
<p>Outreach</p> <p>Target: 40% women</p>	<p>Deploy a comprehensive and gender-sensitive communication campaign at the start to inform the potential beneficiaries about project approach, interventions, eligibility and roles and responsibilities</p> <p>Accommodate timing of community meetings, trainings etc. due to higher care burdens and mobility constraints of women (arrange in-situ training and daily travel)</p> <p>Ensure gender balance among project staff, especially those involved in service delivery</p> <p>Identify and utilize female social mobilisers to gain support within the community to allow women to participate in project activities</p> <p>Use female Agriculture, Livestock and Fisheries Extension staff and gender-sensitive extension services to inform the target cohort</p> <p>Build the capacity of those involved in the community social mobilization, relevant extension staff and service providers</p>	<p>Utilizing a gender-sensitive menu of outreach tools and female social mobilisers will ensure support within the community to allow women access project activities</p>	<p>Number of women receiving services promoted or supported by the project</p>

	<p>through integrating gender considerations into trainings</p> <p>Asses how inclusive existing community organization membership is and how to expand this to more women</p> <p>Identify young women from ultra-poor and BISP beneficiary households for assistance under Component 2</p>		
<p>Promote economic empowerment to enable rural women and men to have equal opportunity to participate in, and benefit from, profitable economic activities</p>	<p>Deploy survey tools to better understand the gender-defined control and ownership rights over key assets and resources affecting livelihoods</p> <p>Component 1:</p> <p>Identify and give additional weightage to women’s priorities in community infrastructure. Ensure that women have the capacity to voice their specific needs</p> <p>Facilitate women’s access to improved inputs, production technology, affordable credit services and extension services</p> <p>Provide women with training on crop production, grading and packaging, aggregation and marketing, value addition/processing, adoption of higher value crops, efficient input use, climate adaptation, post-harvest loss reduction, off-shore/inland aquaculture (fish, shrimp, crab), farm services provision, off-farm income generation, traditional crafts</p> <p>Component 2:</p>		<p>Number of female members in the village organizations supported for the development of business plans</p> <p>Number of women trained in production practices and/or technologies</p> <p>Number of women in rural areas accessing financial services</p> <p>Number of women accessing income generating productive assets</p> <p>Number of women with new jobs/employment opportunities</p> <p>Number of women trained in income-generating activities or</p>

	<p>Provide productive assets for additional income generation to women in ultra-poor BISP households</p> <p>Assist female headed poor sharecropping families to shift to leased land arrangements for greater profitability and economic independence</p> <p>Conduct a gender-sensitive Labour Market Survey</p> <p>Adapt facilities set-up and services delivery to ensure they are accessible, safe and convenient for targeted women</p> <p>Provide job-market readiness young women from poor households through productive assets grants, vocational and technical training, and self-enterprise development grants</p> <p>Train women from the targeted households in income-generating activities or business management and facilitate women’s access to finance</p>		<p>business management</p> <p>Number of young women receiving start-up capital to start small enterprises</p> <p>Number of women participating in the innovative schemes</p> <p>Number of women with increased secure access to land</p>
<p>Enable women and men to have equal voice and influence in rural institutions and organizations</p>	<p>Use quotas to ensure minimum levels of women's representation in consultation and decision-making processes related to the project</p> <p>Component 1:</p> <p>Provide training to women on leadership and negotiation skills to enable them to make informed decisions during the consultation and decision-making processes related to the project at both household and community level</p>	<p>Enhancing women’s professional confidence through trainings, addressing restrictive social norms, using quotas for women’s representation and creating spaces for collective agency will improve women’s positioning and bargaining power within the selected</p>	<p>Number of women in leadership positions in rural institutions and organizations supported by the project</p> <p>Households reporting they can influence decision-making of local authorities and project-supported service providers</p>

	<p>Ensure women’s representation in management positions in the election of VO office bearers</p> <p>Component 2:</p> <p>Utilize community-based approaches during trainings and capacity building for VO managers and members to discuss and encourage women’s involvement in decision making process</p> <p>Establish women only interest Groups or resource centers to strengthen collective agency</p>	<p>value chains and increase their representation and leadership in producer organizations</p>	
<p>Achieve a more equitable balance in workloads and in the sharing of economic and social benefits between women and men</p>	<p>Component 1:</p> <p>Deploy qualitative tools as part of the rapid village socio-economic and infrastructure diagnostic such as the “seasonal calendar” which captures the main characteristics of livelihoods, food, and income generation by describing the activities and strategic challenges of women</p> <p>Provide climate-proofed infrastructure and related to domestic water use and household energy consumption (solar panels)</p> <p>Optimize or construct latrines at household levels in the ultra-poorest communities</p> <p>Organize awareness sessions for women and deploy Community behavior change communication (BCC) on issues</p>	<p>Through the introduction of gender sensitive and climate smart labour-saving technologies women’s time poverty will be improved and this will enable their enhanced participation in the project activities</p>	<p>Households reporting a significant reduction in the time spent for collecting water or fuel</p>

	related to WASH and water conservation and efficiency		
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1. Proposals for activities

91. In order to contribute to the highest potential to reduce poverty, ensure rural transformation and increase resilience, it is recommended that the project adopt a system thinking approach. It could be translated in the following matrix:

	Youth sensitive pathways*	GEWE	Nutrition sensitive pathways*	Climate adaptation*	Environment
C1	<ul style="list-style-type: none"> Social mobilization at village level Inclusive Value Chain Plan development (design, decision, implementation) Inclusive investment plan for basic needs Awareness and education to address restrictive norms as part of the social mobilization processes 		<ul style="list-style-type: none"> Good agricultural practices, including climate-smart practices and agroecology, soil fertility and pest management Small irrigation scheme with water harvesting system 		
				<ul style="list-style-type: none"> Climate insurance (with and in addition to access to loan) 	
	<ul style="list-style-type: none"> Crop diversification within VC approach (mixing cash crops and self-consumption crops) Aquaculture when possible (but caution on skills, assets management and fish feed) Integration of livestock and aquaculture with plant production Crops/fodder adapted to saline soils, practices to reduce impacts of salinization (water and soil) Addressing time poverty through climate smart technologies/water access Exchanges with/involvement of landowners Irrigation schemes 				
		<ul style="list-style-type: none"> Women's economic empowerment (access and control over income from the VCs) to increase dietary diversity 			
		<ul style="list-style-type: none"> Drinking Water facilities Sanitation facilities (with possible options for compost production) 			
	<ul style="list-style-type: none"> Access to local market (provision of local food for local consumption) 				

	Youth sensitive pathways*	GEWE	Nutrition sensitive pathways*	Climate adaptation*	Environment
C2	<ul style="list-style-type: none"> Financial literacy and numeracy skills (<i>adapted to various interest groups (VC, women cooperative, job access, self-employment, local governance of Village Organization and sub-groups)</i>) Skills related to market access & VC Plan Inclusive skill development as per market demand and business incubation 		<ul style="list-style-type: none"> Kitchen gardening (with appropriate focuses given past lessons learned) 		
		<ul style="list-style-type: none"> KAP trainings 			
	<ul style="list-style-type: none"> Analysis of job (wage, self-employed) potential Business in food processing and rural services Green jobs and services in connection to VC need 				
C3	<ul style="list-style-type: none"> Improved land tenure agreement leading to better consideration of climate adaptation and ecosystem services Call for innovation in food sector addressing Environmental, Climate & Social challenges <i>Regulation of informal indebtedness (?)</i> 				

92. Finally, the M&E system would monitor youth, gender, nutrition and climate change dimensions in a disaggregated manner.

O. M&E Function and the Project's Theory of Change

93. SCRCP's Theory of Change takes into consideration the analysis of underlying causes of entrenched poverty among the majority of households in target districts. Rural society in the project districts is heterogeneous and highly complex. Only 20 per cent households own land and, among them, 84 per cent have an average landholding of 7.50 acres. Lack of organization, degraded ecosystems, more frequent climate hazards, small and scattered surpluses of staple crops, dependence on input suppliers' credit on usurious rates, who also act as buyers of produce on exploitative terms, lack of access to production knowledge and technology and uncertain availability of water is keeping the smallholder agriculture well below the potential. As a result, farmers and fisherfolks experience low productivity and poor selling prices, which are later translated into poor income, poor nutrition and increasing vulnerability. The majority of the rural population are tenant farmers, sharecroppers and landless daily wagers. The existing sharecropping tenancy system is mired in low input-low output cycle leading to low returns for both the tenant and landowner. The landless poor lack productive assets and remunerative skills. Vast majority of fisherfolk, which constitute about 11 per cent of the population, work as hired workers and get a share in the catch on terms highly favouring the boat owner and middlemen. Access to finance, insurance and improved inputs is mostly non-existent. Ecosystems are heavily degraded with increasing salinization of soils and sea-water intrusion. Disadvantaged groups from the targeted households, such as women and youth, lacking educational attainment and remunerative skills, are usually engaged in unpaid household-level livelihood activities. The three coastal districts are hardest hit by climate change induced disasters which further contribute to increased vulnerability of ecosystems and livelihoods, leading to loss of natural endowments and increasing levels of poverty.

94. Rural poor in the target districts are not a homogenous group and consist of smallholder farmers, tenants/sharecroppers, landless daily wagers and fisherfolk. A one-size-fits-all approach and set of interventions cannot work for all and would require a nuanced and flexible menu of interventions to address the underlying causes of each group's poverty in a sustainable manner. Intersecting vulnerabilities of both women and men (young and old) also need to be captured and a twin-track approach combining mainstreaming strategies and targeted support will be adopted to address the needs of the specific groups.

95. The Theory of Change (ToC) is based on the premise that IF smallholder farmers/tenants/sharecroppers are organized and capacitated to adopt climate smart agriculture as a business to produce commercially attractive quantities for value chain participation, and the small fisherfolk are organized and provided means to operate free from current exploitative system, and IF ecosystem is preserved and restored, and IF disadvantaged groups such as women and young people from the target households are provided with market demanded remunerative skills and an enabling environment for employment/self-employment along the value chains and rural market, and IF the adaptive capacity and nutrition status of target groups is improved through enhanced incomes, access to water and sanitation and relevant knowledge and practices, and IF there is a supportive environment for livelihoods development in the target area, **THEN** a well-rounded impact can be achieved in terms of increased incomes, improved resilience, women and youth empowerment, improved food security and nutrition and reduced rural poverty.

96. This ToC impact and outcomes will be achieved through three interconnected pathways for both agriculture dependent and fisheries dependent communities.

97. **Pathway 1:** An incremental and community driven process whereby smallholder farmers and fisherfolk are organized, to initially improve existing production and productivity up to true potential through climate smart and nutrition-sensitive agriculture and sustainable fishing practices, achieve

economies of scale through aggregation, and subsequently, with improved knowledge and capacities, graduate to viable market-oriented and climate change adapted value chains of higher value commodities. Access to finance and insurance, with tailored products, is facilitated. Ecosystem services are strengthened. Identified support infrastructure and processing/value addition deficits are addressed through beneficiary centered prioritization and execution. A strengthened extension support is provided along with access to climate adapted techniques, modern production technologies, ecosystem-friendly practices and certified inputs. Professional technical support for value chain development and marketing together with a strong social mobilization element underpins the entire cycle.

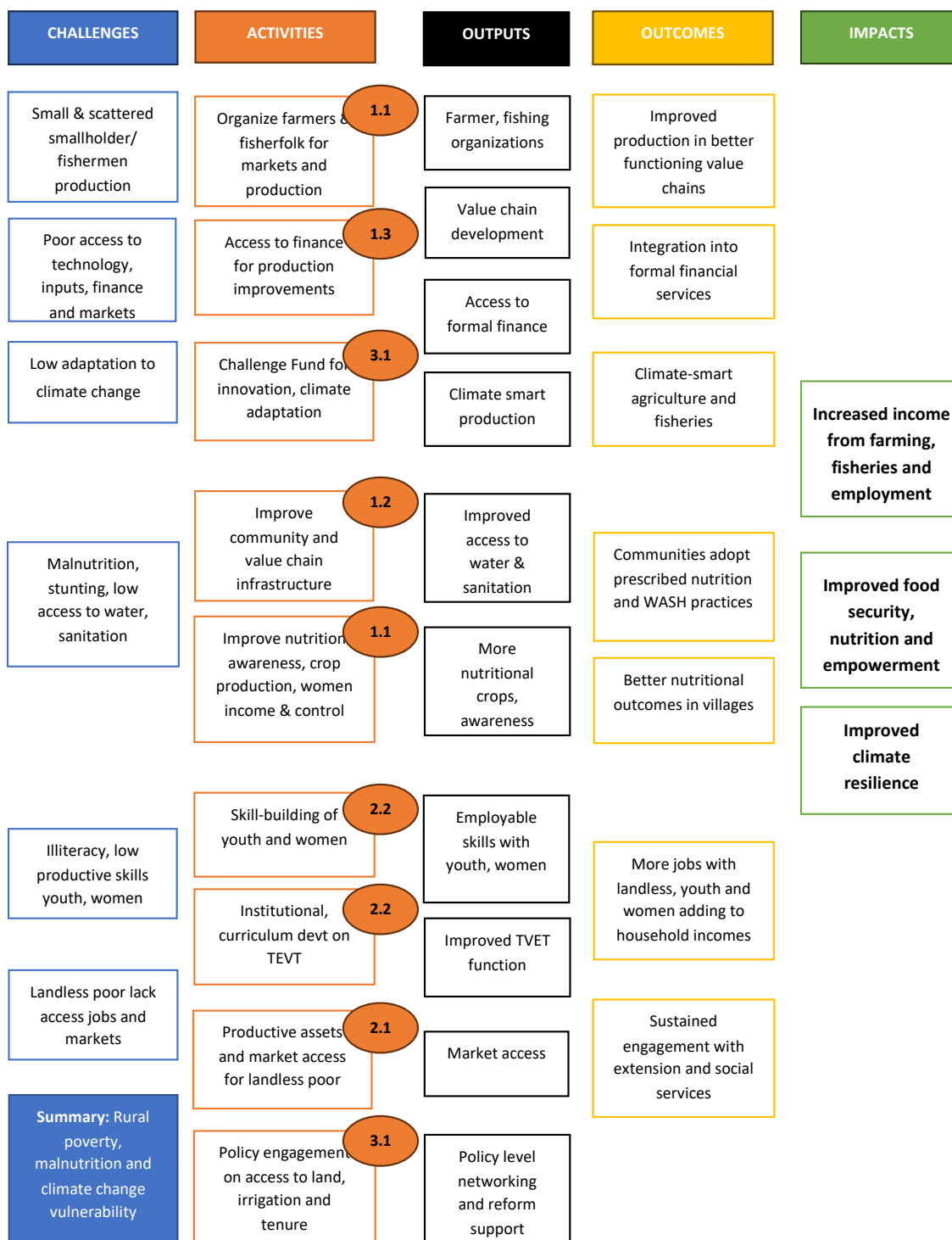
98. Gender disparities and social norms which limit women’s participation are addressed through greater access to remunerative activities, participatory forums, and increased female-controlled income and sensitization sessions on intra-household shared decision making. Labour-saving technologies linked to domestic water use are promoted to tackle women’s time poverty and free up time to perform productive tasks and participate in decision-making processes. Increased decision-making power of women has a positive impact on household expenditures on health and more diversified diets. Social and behaviour change activities towards improving target groups’ knowledge and practices on food choices (in production, purchase and consumption), food preparation, processing and conservation, healthy diets along with good hygiene and sanitation practices contribute to improved nutrition at family level.

99. **Pathway 2:** Disadvantaged young people and women from the target households are enabled to participate in targeted activities and acquire local market-demanded technical and vocational skills and enterprise development training, based on local labour market analysis, coupled with start-up business finance and productive assets. They, also take advantage of employment, enterprise and service provision opportunities generated by the developing value chains in processing, value addition, renewable energy, digital marketing, logistics, green services, and wider employment market.

100. **Pathway 3:** An enabling environment offers improved access to services and productive resources (soil and land, water, knowledge, product processing, finance) and enhances climate resilience. Strong linkages with ADB-funded infrastructure and nature-based solutions for climate risk reduction, WB-funded STAR project, Emergency Housing Reconstruction Project, GoS nutrition support programme “Sehatmand Sindh” and GoS Union Council Development Planning improve coastal resilience, address socio-economic infrastructure deficits of target poor communities and access to safe water and sanitation, reducing the prevailing water-borne disease burden, malnutrition and stunting and providing enabling conditions for inclusive and resilient livelihoods development.

101. Key assumptions for these impact pathways: Updated BISP data on poverty and transparent targeting process implemented; households are willing to participate in project activities; ecosystems degradation is stopped and gradually restored; market-based and climate-adapted business plans developed under VOs and subsidiary interest groups and 4Ps; beneficiaries willing to use financial services adapted to the needs of beneficiaries, and selection of competent services providers and policy reform process facilitated by Planning & Development Board.

102. Graphic representation of SCRP Theory of change is presented on next table:



P. Progress Reporting, Knowledge Management and Communication

103. Timely reporting and communication are important to take timely corrective actions and to learn from implementation experience to further improve project management effectiveness and efficiency. Monthly, quarterly and annual reports including reports from studies would be produced by the project to relevant stakeholders.

1. Baseline

104. A baseline study, covering the mandatory indicators (as per logframe), will be conducted in year-1 through a third-party service provider to document the initial status of target beneficiaries prior to commencement of the project interventions. This information will, at mid-term and completion, become the reference against which to measure changes, and therefore appreciate project outcomes and impact, or lack thereof (see **Annexure-3: Detailed checklist of factors for baseline study**).

2. Mid Term Review (MTR)

105. P&D and IFAD would undertake a mid-term review in the middle of fourth year of the project lifecycle to review the project progress, achievements, and implementation constraints. In particular, it would review the following: (i) achievement and improvements in the production systems, improvement in food security, and increase in income; (ii) poverty graduation of ultra poor asset beneficiaries; (iii) youth job readiness and market integration (iv) the performance of VOs and interest groups and changes in production, productivity and smallholder and fisherfolk incomes; (iii) performance of implementing partners, (iv) financial and procurement management; (v) and human resources management. Based on the findings, necessary changes in approach and project components will be mutually agreed along with an action plan for the remaining life of the project. The aim will be to address any existing impediments, improve project delivery and enhance impacts. IFAD may appoint, in consultation with SCRIP, an external agency to evaluate the impact of the project, if necessary.

3. Annual Outcome Surveys

106. PMU shall also start conducting annual outcome surveys through a third party after the MTR to validate the results reported in internal M&E assessments.

4. Management Information System (MIS)

107. SCRIP will develop a customized MIS system in the first year of the project to meet data collection and reporting requirements of the project coherent with its log-frame. The dashboard for data entry and reporting will encompass information on physical and financial progress, impact evaluation analysis and reports, IFAD's first and second level core indicator tracking, and other baseline data. This will be automated computer-based project to generate, monthly, quarterly and annual progress reports on financial and physical progress including progress related to outcome indicators and outputs. Additionally, GIS and geotagging will be used to update, troubleshoot, and disseminate real time progress.

5. Project Completion Review and Evaluation

108. As the project reaches completion, the PMU would prepare a draft Project Completion Report (PCR). IFAD and the Government will then carry out a joint validation of PCR based on the information in the Project Completion Report and other data. An impact evaluation will also be carried out. The PCR will be developed based on the guidelines of IFAD.

6. Learning and Knowledge Management

109. Knowledge management and learning will be an integral element of project implementation, particularly in view of the scaling up agenda by Government and the project policy influence objectives. A comprehensive knowledge management strategy for the project in line with the newly released IFAD Knowledge Management Strategy (2019) will be developed in the first year of the project. The strategy will focus on the processes that will be involved in building a robust KM system in the project.

110. The strategy shall clearly identify knowledge products, events, uses and forums to collect, collate and share the knowledge generated through project interventions. The KM strategy has four pillars i.e. (i) use the project intervention as action research; (ii) systematic assessment and analysis using experimental designs which are statistically valid and robust; (iii) deriving inferences/conclusions have strong evidence base; (iv) devise knowledge products; and, (v) disseminating knowledge products using various channels/media. The KM function will particularly focus on success factors pertaining to integration of small farmers and fisherfolk to market chains and diversification into high value products and through investment in skills and entrepreneurship foster women's and youth's economic empowerment, while at the same time mainstreaming nutrition and climate adaptation. Formal consultative sessions will be a regular feature for relevant government functionaries, and other stakeholders—including beneficiaries' groups to review progress, share lessons learned, improve processes, and make project visible.

111. A dedicated M&E, KM, and Communication Section with suitably qualified and experienced staff is part of the organizational arrangements at the PMU and DCUs. The KM system will enable the project to generate, capture, share and disseminate relevant information and knowledge to various stakeholders in a timely manner. The project updates will be disseminated at broader level through using web-sources including social media such as Facebook used as a knowledge sharing tool, and also linked to IFAD Asia website. The team will extensively document and share knowledge generated in the project. The QRM forums will be used as potential KS venues for capturing lessons learned and best practices leading to development of related knowledge products.

112. PMU, implementing partners and technical support team will follow IFAD's guidelines on KM and COM to achieve visibility and implement the KM related activities to be conducted coherently. This will help ensure smooth implementation of project activities and facilitate to achieve project development goals and objectives.

Q. Implementation Partners' M&E Responsibilities

113. PMU shall organize a three-day project planning/inception/orientation workshop in Karachi to give its own and IPs staff orientation in project purposes, objectives, approach, methodology and roles and responsibilities. The orientation training will be important to ensure an equal level of understanding amongst all PMU and IPs staff.

114. IPs shall be responsible for internal monitoring of the activities entrusted to them and for ensuring proper checks to ensure quality. PMU and DCU staff will be responsible for external monitoring of the activities entrusted to IPs. IPs shall provide monthly calendar of key interventions and training events so that DCUs and PMU can undertake visits and do evaluation of such events.

R. Donor and Development Partners' Coordination

115. Other pre-start up activities will include creating a coordination platform that allows SCRP to coordinate with other donor and government funded projects that are working on similar themes in the target areas. Annual coordination and experience sharing meetings, under the lead of P&D Board will be organized with the other on-going development programmes in the target districts to create synergies, and avoid duplications and contradictions. Partnerships with FAO and WFP will be actively pursued.

III. TECHNICAL AND OPERATIONAL GUIDELINES FOR IMPLEMENTATION OF COMPONENTS

A. Component 1 – Transformation of Coastal Rural Incomes

116. This Component consists of three mutually reinforcing sub-components including: (i) Professional Farmer Organizations Development, (ii) Public-Private Partnership/4Ps Development and, (iii) Strengthening Institutional Services.

1. Sub-Component 1.1 Organization, Planning & Training of Producer Organizations and Interest Groups

117. **Coverage:** Project will cover 500 villages of agricultural and fishing communities in 53 Union Councils of seven Talukas of 3 districts, with priority given to those most affected by climate change. Taluka and Union council selection will be based on poverty ranking of Talukas within each district and poverty ranking of Union councils within each Taluka. Indicative list of target Talukas and Union Councils based on poverty number is attached as **Annex 20-A**, which is subject to further validation at start-up in the light of other ongoing projects (to avoid duplication) and prevalence of smallholder agri-production systems. Poverty ranking of tehsils, Union councils and villages, based on number of BISP beneficiaries in each, will largely determine the inclusion and exclusion in project.

118. **Project entry point:** Almost all villages in the three districts have some form of community/village organization which will be used as Project's entry point by the implementing partners. The VOs will be further reorganized and strengthened to ensure inclusivity and representation of all project target groups. Villages that otherwise qualify as target villages but with no village organization will be assisted to establish one.

119. **Safeguards against Elite Capture:** To minimize chances of elite capture, project will:

- (a) Prioritise villages and Union Councils that have high prevalence of smallholder agriculture and fisheries;
- (b) The average ceiling for investments in a village and Union Council and cut off limits for various investments schemes shall not be exceeded;
- (c) Community infrastructure schemes will need to clearly demonstrate that they benefit the entire village or at least large majority of the village; have per capita beneficiary cost equal to or better than the prevailing costs in similar projects; and, directly contribute to village socio-economic well-being, especially those from poor strata. The value chain support equipment and structures shall stem from an approved value chain plan of the Interest Group and should clearly demonstrate its contribution to production, productivity or value addition.

120. **Implementing Partners:** Services of one or more IPs with demonstrated capacity for social mobilization, agriculture/ value chain development, climate smart agriculture, training and capacity building and poverty graduation of landless poor, will be engaged organizing the villages and interest groups, assisting them in development of value chain plans/business plans and their implementation, providing technical support in design and execution of identified community and value chain infrastructure schemes, linking them with credit providers and identifying beneficiaries for productive assets and vocational and technical training. IPs will also be responsible for facilitating interface with identified extension service providers and STEVTA.

121. **Implementing Partners Selection:** PMU will carry out competitive selection of implementation partners as per IFAD Procurement Guidelines. It will involve development of TOR, invitation of expression of interest, evaluation of EOI's and short-listing, invitation of financial and technical proposals from the short-listed firms, evaluation of proposals by a committee constituted with approval

of PSC, results of evaluation submitted for IFAD No Objection, and award of contract to successful bidder(s). Key criteria for evaluation of bidder's competence will be presence in the project area, capacities for value chain development, social mobilization and pro-poor inclusive development.

122. Target Villages Engagement: Project will deploy a comprehensive communication campaign at the start involving radio and televisual media, as well as electronic and print media to inform the potential beneficiaries about project approach, interventions, eligibility and roles and responsibilities. This will be further backed by use of Agriculture, Livestock and Fisheries Extension staff to inform the target cohort. This will be followed by IPs and Extension staff visits to target villages to organize the willing villages into partner VOs, as per the well-established process in prevailing social mobilization approach. The VO will be inclusive in nature and form in which every household in the village is represented and has a voice. The key implementation steps will be the following:

- (a) Step 1: *Targeting, Community Mobilization and VO formation*: Selection of UC and villages as per project selection criteria; project introduction, community assent/agreement and election of VO office bearers where women and youth representation in management positions will be encouraged. (Output: VOs established/reactivated)
- (b) Step 2: *Rapid village socio-economic, and infrastructure diagnostic*: It will be a participatory exercise involving all households, including women and youth, to identify main interest groups and sources of income, contributory factors/challenges in income enhancement, community and value chain support infrastructure deficits/gaps, climate change related challenges and practices, and mitigation/adaptation related infrastructure needs, women and youth status and needs, and nutrition and food security challenges. A standard suggested format is attached in **Annexure-2: Outline of Rapid Village Diagnostic** which may be updated by PMU and IPs based on experience. It is important to not make it laborious and too detailed and time consuming. It's a means to an end and not an end itself. It is meant to draw and broad picture of stakeholders, means of production, impediments in improving production and incomes and potential options available for each interest group to increase incomes (Output: Village level diagnostic).
- (c) Step 3: *Umbrella Village Plan*: Based on rapid assessment, an umbrella village plan will be formulated in a participatory and inclusive manner. Umbrella plan will be presented in general VO assembly for endorsement through a written resolution. See detail at Para 115 below. (Output: 500 VO Plans)
- (d) Step 4: *Establishment of sub-village level Production/ Interest groups*: The production/interest groups identified in the VO Umbrella plan will be assisted to organize around a business plan for their preferred production/vocation. Specifically, this entails:
 - *Production Interest Groups readiness and Plans*: IP's business development staff will assist each production interest group to elect head and secretary/record keeper, develop their *value chain plan* (agriculture and/or fisheries), identify training, technical assistance and demonstration needs, and identify support investments for equipment and structures, and credit. These groups will also include tenants and sharecroppers engaged in agri production activities. Specific attention will be given to cultivation and climate-smart agriculture practices to adopt sustainable agriculture (notably via the entry points of soil fertility and pest management). The value chain plan shall decide the crops based on their nutritional superiority and income generating potential. Value chain plans will be submitted for PMU approval. For the credit needs identified, the IP staff will link the interest groups with credit provision partner(s) (see sub-component 1.3). **Annexure-5: Interest Group Business Planning Format provides further details.**

- *Disadvantaged Households' Interest Groups:* In the interest group formation process, the ultra-poor and BISP beneficiary households and young men and women from such households and other low-income households will be identified as distinct interest groups for assistance under component 2 through productive assets grants, vocational and technical training, and group and self-enterprise development grants. (*Output: Disadvantaged Interest Groups' Value Chain Plans*).
- (e) Step 4-A: *Design of priority infrastructure:* in parallel with the previous activity, the identified community infrastructure will be designed and costed by IP's engineering staff and approved by PMU (implementation will be part of sub-component 1.2). All existing and new infrastructure in the village will be geo-referenced. Climate proofing of all community infrastructure will be ensured in the design and cost estimation.
- (f) Step 5: *Mentoring, supervision and exit:* Every VO and interest groups therein will be supported for the duration of their plan implementation which will be about 30 months. IP staff will maintain close and regular contact to ensure that agreed activities in the umbrella village plan and interest groups' plans are effectively implemented. Close mentoring and handholding of component 2 beneficiaries will be ensured.

123. ***Umbrella Village Plan (UVP):*** Following the rapid village socio-economic diagnostic, an Umbrella Village Plan preparation will be on a standard format issued by PMU for guidance and observance. See **Annexure-4: Umbrella Village Plan Format** for guidance which may be further developed and elaborated by PMU once the implementation partners are on board to ensure that covers all basic aspects of project objectives and interventions. The VO Umbrella Plan will consist of three parts:

- a. **Part 1 of the plan** will identify the production and productivity challenges of niche crops with potential for value chain development, related training and demonstration interventions required, climate and eco-system challenges and possible interventions to improve resilience and/or mitigate impacts; identification of interest groups for support; subsidized credit needs of the beneficiaries and identified extension support requirements from public sector extension agencies.
- b. **Part 2 of the plan** will identify the community and value chain support infrastructure investments, as well as infrastructure needs to adapt to/mitigate climate change impacts (both for IFAD and larger ADB investments); estimated costs and phasing; The identified ADB larger climate resilience related investments will be conveyed to concerned ADB PMUs through SCRPMU for incorporation in their plans.
- c. **Part 3 of the plan** will identify the beneficiaries for poverty graduation interventions and job-market integration of the youth as per project criteria.
- d. **Part 4 of the plan** will cover interventions related to mainstreaming aspects including youth; gender; nutrition; WASH, including hygiene and health practices in relation to project activities (in particular when livestock and drinking water provision) as well as climate adaptation and environment preservation at community level.

124. The VO Umbrella plan will be submitted by IPs to PMU, through DCUs, for approval. Once the plan is approved, only copy of plan will be provided to the VO for their record and one copy each to IP and partner extension agencies. Each Plan will be of two and half year (30 months) duration or 5 cropping cycles. The plan in the first stage will address the existing challenges of sub-optimal production, lack of aggregation, middlemen dependence for inputs and marketing, weak extension support, climate vulnerability and climate adaptation, quality assurance and value addition. In case of agriculture, livestock and fisheries interest groups, the value chain plan will demonstrate net incremental income per member by end of the term.

125. ***Production/Interest Groups:*** Project will cover, on average, about 300 households in each revenue village consisting of smallholder farmers, fisherfolk, tenants and sharecroppers, landless poor

including youth and women. Any large landholders in the village will not be excluded from the VO as long as they commit to abide by VO democratic process and project guidelines. Examples of interest groups include: crops production, high value crops, products aggregation, value addition and marketing, agri-service provision, livestock for meat/fattening, dairy production, marketing, value addition, fisheries, aquaculture, mariculture, fisheries processing, preservation, grading, marketing, traditional crafts production/marketing etc. Each interest group will range from 5 to 40 members and each revenue village will, on average, have around 10/20 interest groups. Mixed interest groups of men and women will be established where socio-cultural norms allow. In other cases, women and youth only interest groups will be promoted to socially and financially empower them. Youth and women supported through enterprise grants will also be assisted to form interest groups around common business plans.

126. Livestock interest groups will be for both dairy and meat animals. Particular focus will be on households dependent on dairy and meat animals for their livelihoods. The Interest Groups' business plans will cover aspects of breed and feed improvement, water and shelter, milk collection, preservation and transport, value addition and by product development and collective marketing of dairy products and meat animals. Such interest groups will be identified and supported particularly in the hilly areas of project coverage where there is little crop production potential and areas affected by salinity and water logging. Manure recovery will be encouraged to contribute to climate smart agriculture, including e.g. via kitchen gardening.

127. Interest Groups, particularly of youth, interested in provision of input supply, harvest services, pest management, product processing, packaging and value addition, product marketing services, off-shore/inland aquaculture development will be prioritised. They will be linked to project grants for productive assets as well as credit services for procurement of required equipment and small machines for service provision, enterprise upscaling etc.

128. Each interest group will have an individual production/business plan under the overall village umbrella plan. The value chain support infrastructure and equipment will be primarily guided by interest group plans.

129. Once a critical mass of interest groups engaged in particular commodity is reached, they will be confederated into producer organizations and facilitated to engage with private sector under 4P and or contract farming arrangements.

130. **Interest Groups Governance:** Each Interest Group will elect, through consensus, a Group Leader and a Secretary-cum-account keeper. Group Leader will be responsible for convening group meetings for plan development and implementation, conflict resolution, group adherence to agreements with outside partners, consolidation of demand for inputs, procurement arrangements, post-harvest recoveries from members, payments to suppliers etc. The Secretary will assist the Group Leader in financial, production and procedural account keeping of groups activities. The accounts will be open to all members for checking. Group Leader will present to IG the financial and production numbers to entire group every quarter. Complete record of groups meetings and decisions will be kept. Appropriate training for Group Leaders and Secretaries will be organized by IPs as per the numbers and budget provided in PDR.

131. **Value Chain Approach:** SCRIP will adopt a value chain approach for improving the production and productivity of smallholder farmer and fisherfolk interest groups. Project support will be focused on assisting the farmers and fisherfolk to achieve true production potential of their existing economic activity and get fair market return through access to improved inputs (including self-produced inputs such as compost or biopesticides), production technology, affordable credit services, training, extension services, aggregation/grading and competitive markets. At the same time, smallholder farmers will be assisted to transition to market demanded higher value products, value addition, processing and aggregation. From project year 3, interest groups engaged in similar products in a Union Council will be federated and 4Ps will be pursued. In poor and degraded land, close to coastal areas,

alternate agricultural productions could be developed according to Villages motivation and actual skills, such as aquaculture or fodder production in tidal areas (via adapted crops).

132. **Complementarity with ADB Investments:** UC and Village selection will be aligned with ADB investments in climate change mitigation and adaptation infrastructure. Needs for such infrastructure identified in the VO umbrella plans will be shared with ADB’s Project Implementation Units in Irrigation and Forestry Departments for consideration and inclusion under ADB financing and coordinated through joint Project Steering Committee. Both IFAD and ADB investments will be under the oversight of a common Steering Committee and annual and mid-year meetings of PSC for both financings will be held at the same time to ensure synergies and complementarities. In additional, a Project Coordination Committee, consisting of PD SCRIP and PDs of ADB-funded Irrigation and Forestry Components, will be notified by PSC and shall meet at least once every quarter to ensure close alignment and synergy between IFAD and ADB investments at village level.

133. **Interest Groups’ Training and Demonstrations:** Based on the value chain plan of each production related interest group, necessary training and/or demonstrations will be financed by the project to enable them to fully understand the processes and practices for realization of the plan objectives and strengthen the resilience of their activities in the face of climate change. Depending on the subject, the training & demonstrations will be delivered by IPs specialists, partner extension agencies and external specialized agencies like FAO. The trainings may cover, but are not restricted to, production practices and/or technologies (in particular soil fertility and crop protection under climate smart agriculture), saline agriculture practices, sustainable fishing practices, adoption of higher value crops, efficient input use, water conservation and efficiency, other climate adapted practices under climate smart agriculture (see **SINDH COASTAL RESILIENCE PROJECT**)

SOCIAL, ENVIRONMENTAL AND CLIMATE ASSESSMENT PROCEDURES (SECAP)

STAKEHOLDERS ENGAGEMENT PLAN (SEP) & GRIEVANCE REDRESS MECHANISM (GRM)

JANUARY 2024

INTRODUCTION

Project Rationale

1. Pakistan is the world's 5th most populous country with a population of 240 million inhabitants (2022 census) out of which 63 percent is rural. Sindh is the second most populous province in Pakistan with a population of 55.7 million. Sindh has a well-developed agricultural base supported by an extensive irrigation network on the Indus River. With its 350 km coastline, Sindh has 48 percent share in fish export from Pakistan. Agriculture contributes 24 percent to Sindh GDP and generates 70 percent of the employment. Livestock and fisheries contribute over 50 percent of the agriculture GDP of the province. The poor derive 56 percent of their income from agriculture. Livestock provides critical income security for many rural households and is of particular importance to women. People lack clear land tenure rights and most of the poor smallholders depend on landowners and middlemen. In addition, the sector is facing alarming ecosystem degradation due to pollution, deforestation, and upstream massive water withdrawals in the Indus basin, leading, among others, to sea intrusion and salinisation. Climate change raises smallholder vulnerability, with episodes of heatwaves, floods, and cyclones in the arid context of Sindh coastal area.

2. Despite its resource endowments, Sindh is afflicted with large pockets of endemic poverty, particularly in rural areas. In Sindh, about 30-35 percent of the population lives below the poverty line. The prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively and exceed the national averages of 20 percent and 40 percent respectively.

3. IFAD will be financing the Sindh Coastal Resilience Project (SCRP) in the three poorest districts with a population of 3.87 million/697,262 households or 7 percent of the provincial population. The three districts namely Thatta, Sujawal and Badin are recognized as the most deprived and under-developed with a multi-dimensional poverty headcount respectively of 86, 85, 82 percent. Of the landowners, 84 percent own less than 25 acres. A very small population of the three districts own land which is 2.2% households in Thatta, 0.4% in Sujawal and 4.3% in Badin. Small holdings, traditional low input low-output production systems, lack of access to technology, services and financial services, and small and scattered marketable surpluses keep performance of smallholder farming below potential. Coastal fishermen communities are the most deprived in terms of productive assets and social infrastructure/services. 76 percent rural households are landless and work as tenants/sharecroppers and working on land owned by a large landowner as tenants.

Project Development Objective and Project Components

4. The Project development objective is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and services; (ii) Increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilitates access to natural resources and support services.

5. Project Components: SCRП will have an inclusive approach to transformation of economies and incomes in the target rural communities. The project consists of three complementary components that address the causes of poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.

6. Transformation of Coastal Rural Incomes: Rural communities organized and assisted to develop capacities for market oriented improved productivity and production and value addition and transition to higher value outputs/products based on structured value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.

7. Economic and social Inclusion of Disadvantaged Groups (job market and value chain participation facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored enterprise development and technical and vocational service provision).

8. Project Management and Policy Support: Establishment of an efficient project management structure (a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing in buffer zone etc.).

Purpose of the SEP

9. The purpose of this Stakeholder Engagement Plan (SEP) is to prepare a strategy and a plan for consultation with the Project stakeholders, obtain their perception and feedback on project interventions, proposed mitigation and adaptation measures to address the potential project risks, and their views and recommendation on the Project interventions. SEP is also a lever to ensure the project meet the needs of the population and involves them fully.

OBJECTIVE OF SEP

10. The SEP is aimed at consulting about Project information concerning objectives, interventions, outcomes and impacts on the target communities including climate change and environmental impacts and obtain their feedback on the overall implementation and mitigation plan for the project. The consultation process will provide the stakeholders with an opportunity to inform and influence decision-making on the project interventions including effective grievance redress procedures. Stakeholders' engagement will ensure transparency in project activities and create a sense of ownership among all concerned.

STAKEHOLDER IDENTIFICATION AND ANALYSIS

Affected Parties

11. SCRP will involve and affect many people. Small holder farmers, fisherfolk and landless poor of Thatta, Sujawal and Badin districts will be affected and engaged directly under different interventions including value chains, infrastructure, financial services, extension and skill development services provision.

12. These smallholders will be reached via Villages Organizations. The village development roadmaps to be prepared for the development needs of the concerned villages, will identify various interest groups based on their material and natural endowments, development potential, orientation and preference. These groups will be identified and formed during project implementation, examples include: farmers through crops production interest groups; women and farmers through livestock interest groups; fisherfolks interest groups (leading possibly to aquaculture); traditional crafts production/marketing interest groups, etc.

13. Each interest group will range from 30 to 40 members and each Revenue Village will, on average, have around 10/12 interest groups. Women and youth representation and participation in VO management and subgroups will be ensured. Mixed interest groups of men and women will be established as much as possible when socio-cultural norms allow. In other cases, Women only interest groups will be promoted especially in dairy, small ruminants, processing and value addition and traditional crops. In addition, Youth groups (combining young women and men) will also be set up to ensure that youth can meet, discuss their situation, and challenge, and build up strategies to better link with established adult groups and stakeholders, as well as to develop their own capacities and vision. It could be very promising to mobilize young people for village assessments and analysis under the supervision/guidance of support organizations to provide methodologies and ensure a strong empowerment.

14. All these subgroups must consider the mainstreaming themes (Climate, Ecosystems, Nutrition, GEWE and Youth Inclusion) in their collective and/or individual business plan: how each group integrated each theme as a source of opportunity and strength?

Other Interested Parties

15. The current and usual socio-economic partners of smallholders are landowners, middle-men and inputs suppliers. The purpose of the project is to enable smallholders to become more independent from the latter (longer-term land agreement; better access to formal financial services, better access to good quality inputs). Thus, while landowners, middle-men and input suppliers are not the targeted beneficiaries of the project, obviously, they will be impacted by the project and may slow-down the results. This is the reason why it is recommended for SCRCP to develop contacts with landlords, middle-men and input suppliers, explain the objectives of the project, and explore the long-term interests they may have with enhanced smallholder livelihoods, and climate smart agriculture. Under any circumstances these stakeholders should directly benefit from the project, but they shouldn't adversely affect the impacts of the project.

16. The provincial government departments at the province and district level including Planning and Development, Agriculture Extension and Research, Fisheries, Coastal Development and Local Government will be involved in the Project implementation. Other non-government implementing partners like rural support organizations (RSOs) and NGOs will also be involved.

17. Both public services and NGOs should be trained as part of project implementation to better play their role in supporting smallholders and poor households. IFAD and ADB as financing agencies have an essential role to play. PMUs and implementing partners from other projects in Sindh will be, depending on the aim, approach and geographical implementation, involved to foster cooperation, capacity development and more integrated support.

18. At the provincial level, GoS will receive policy support in view to set up an enabling environment pro-poor households and smallholders.

Disadvantaged Groups

19. SCRCP has identified disadvantaged groups including landless, women from BISP beneficiary families, and male and female youth from households with poverty score 0-32.

Analysis of Stakeholders

20. Majority of the target districts' population involved in agriculture is either smallholder or has no land and is dependent on landlords and middle-men. Similarly, most fishing communities work on others' boats as labourers and helpers with limited or no economic space for themselves. They are mostly indebted to the landlords, boat owners and middlemen which is almost an endless process continuing for decades. Because of this situation, they are highly vulnerable to climate change impacts and recurring natural disasters like floods, high tides, sea level rise and cyclones coupled with ecosystem degradation. Sea intrusion, degraded soils due to salinity, saline groundwater, shortage of water for irrigation due to excessive withdrawals upstream during peak periods further add to their perils. SCRCP will help build their resilience to cope with these disasters and support them in developing and improving their economic wellbeing.

21. This diverse group represents SCRCP stakeholders ranging from directly affected and benefited people to many indirectly benefiting communities. Those who are at the receiving end are those with a small source of income like smallholders and fisherfolk while there are others who have no regular source of livelihood except seasonal or occasional daily wages. Poor women and youth with meagre livelihoods and no or poor skills are making a good part of the target beneficiaries. The mobilization and development of these communities to effective and efficient village organizations (VO) will be a key to achieving the objective of the Project. A diligent needs assessment and implementation of the proposed village development plans will depend upon proper mobilization and capacity building of the VOs.

22. The expected interest groups will have varied interests according to their choice of business like agri inputs supplies, dairy, fish, grading, marketing, processing and packing, etc. However, they will need to be supported in proper orientation and inclusive and participatory business plans development leading to improved agency and empowerment.

23. The more important group of implementing departments from the provincial government like Planning and Development (Project Management Unit) , Agriculture, Fisheries and Coastal Development Departments village organizations (VOs), RSOs and NGOs as Social Mobilization Partners (SMP) , make another group of stakeholders whose role will be crucial to the success of the Project. Capacity and previous experience of implementing partners in similar activities of climate sensitive interventions is crucial to the Project. In particular, PMU and DCUs will have to consider the assets and skills provided by recent or ongoing projects in Sindh and in the three targeted districts. For examples, the GCF funded project “Transforming the Indus Basin with Climate Resilient Agriculture and Water Management” (2020-2026) has supported, in the district of Badin (as well as Umer Kot and Sanghar districts in Sindh), agrometeorological service providers as well as extensionists with Climate Smart Agriculture skills. The supported farmers might also be very key to support and strengthen the other communities.

Summary of Project Stakeholder Needs

24. The following lines describe the expected needs of the stakeholders which may be refined when the project will start being implemented after meeting with them.

25. Foremost are the government departments including PMU and others to be well versed with the project objective and proposed interventions. The Agriculture and Fisheries Departments should have the knowledge and experience of climate smart agriculture, salinity management and fisheries management as affected by climate change. The introduction and adaptation of available best practices, techniques and locally suited technologies in agriculture and fisheries will be essential to achieve the goal of the project.

26. Agriculture Department is already working with FAO in climate smart agriculture (in Badin district) and should be able to ensure all the three districts have the required knowledge for such interventions, however, the Fisheries department needs, for additional skills and know-how, will have to be identified. As importantly, public services will be supported to adopt both, a system approach (so that technical advice can be provided given the constraints and potentials smallholders are facing from various perspectives), and a participatory approach (built on the practices, knowledge, objectives of smallholders). The services they will provide throughout the project should lead to the empowerment of local communities from a technical, a social and an economical point of view.

27. SCRP will be implemented through SMPs to be hired through a competitive process. One of the requirements for them would be their experience and capacity for delivering such services to the government officials as well as VOs and other interest groups. Consultants and other service providers, as required from time to time, will also have the required knowledge and experience as per needs of the project.

28. SCRP seeks to develop the resilience of poor and vulnerable smallholders. In addition to technical and economical skills, smallholders will have to be empowered through the project, encouraging self-confidence and agency. To do so, members of Village Organizations and Subgroups (see 3.2 above) will be provided with basic and sufficient economic, social, climate and environmental information related to Sindh context and trends and their links with food system and nutrition (see as an example the development for information on climate in paragraph .(below .26

29. For the same reasons, exchanges among villages, and a few visits of communities with success stories outside the three districts might be organized. Meetings among subgroups, between male, female and youth subgroups will be encouraged at village level to foster cooperation and inclusion. Bargaining capacities should also be skilled for subgroups to negotiate with their economic partners (suppliers of inputs and services, collectors, landowners). Skill provision in governance mechanisms will help to ensure smooth running of Village Organizations and interest subgroups. In addition, functional literacy might be also needed particularly for group leaders.

30. Strengthening technical and business capacities of various Villages Organisations and subgroups will be key, as part of Components 1 and 2. This involves taking existing skills into consideration, fostering peer exchanges, setting up training courses using the Farmer Field School approach and strengthening technical decision-making capacity. Depending on subgroups and their business and adaptation plan, focuses might be provided on Climate Smart Agriculture (salinity and water management practices, drought resistant varieties of crops, short duration crops, manure and compost, introduction of land levelling, practices like zero tillage, mulching, bed and furrow irrigation and sowing in lines using drills, agrometeorological information, post-harvest and food loss reduction methods), on fishery and aquaculture (marine meteorology, fisheries management, fish feed, aquaculture and reducing post-harvest losses), on livestock (animal feed, animal health), on food processing (food storage conditions, food transformation techniques, food transport), on kitchen garden production, on rural business development. Furthermore, depending on the villages' job needs assessment, technical skills will be provided by STEVTA (smartphone maintenance, solar panel installation and maintenance, vehicle and engine maintenance, for employable skills and self-employment business activities).

31. As much as possible and relevant, exchanges and links among groups, for technical solutions and partnerships will be encouraged (e.g., leading to increased manure recovery for crop production, or to mix rice production with shrimp product for example, or introducing fodder production in tidal zones).

32. In addition, those groups will be supported to strengthen their positioning and obtain more adapted services from suppliers (supply of inputs and services such as finance and agrometeorological information, extension services) as well as from markets and food collectors. Special focuses will be provided on land tenure for smallholders to understand land agreements. To do so, support organizations will be essential and must adopt a participatory approach enabling smallholders and villages groups to more empowerment.

33. Overall, the target communities need to be sensitized about climate change and its impacts. Generally, there is an understanding about the change in weather like change in rainfall pattern and intensity, occurrence of floods, droughts and cyclones but awareness about the possible climate trends, their expected long term impacts, the connections between climate vulnerability, healthy/degraded ecosystems and agricultural productions will be very key, in order, for farmers, social groups and households, to prevent and mitigated these climate impacts in adopting adaptation options and coping with disaster risks.

34. There will always be a need for financial support to the target communities and groups. SCRIP has included the process and mechanisms for introducing financial facilities to farmers and fishermen to invest and adopt the technologies to overcome the climate related losses.

STAKEHOLDER ENGAGEMENT PROGRAM

Purpose and Timing of Stakeholder Engagement Program

35. The purpose of stakeholders' engagement is to take them on board about the whole process of project development and implementation, its objectives, proposed interventions, implementation methodology and process, its benefits and risks etc. As discussed above, the stakeholders have already been identified. IFAD and the relevant departments of the government of Sindh (Planning and Development, Agriculture [extension, research, water management], Fisheries, Coastal Development) are already on board since the concept stage. Frequent consultation meetings have been held with them in Karachi and Badin by the IFAD SCRIP Design Mission in June 2023 and Design Mission in November 2023 for discussing the approach and methodology, target groups, interventions and implementation mechanism. The Concept Note was shared with Government of Sindh for its feedback while the Project Design Report will also be shared with them when ready.

36. With the start of implementation, IFAD will engage with the concerned PMU and other government departments' staff at the Secretariat and concerned Districts level in a start-up workshop to apprise them about their roles, build their capacity on the implementation strategy, selection and involvement of the target communities and groups including youth and women. To mark the occasion, a public session will be held with the strategic partners and representatives of the beneficiaries to present the project and gather comments and proposals concerning its implementation. Some key questions about implementation and the conditions for

success will guide the discussion and ensure involvement of parties. For examples the selection criteria, formation of village organization and umbrella development plan of VOs will be discussed.

37. At early implementation, umbrella plans will be designed with VOs, as part of a participatory approach. They will identify priority community and value chain infrastructure deficits that need to be addressed. Identification of interest groups around certain value chains, development of business plans, capacity building needs and required technical assistance will be explained.

38. Social Mobilization Partners to be hired as implementing partners will be deeply involved in the project at all levels. They will have a key role in implementing the project to the satisfaction of client and beneficiaries for minimizing the chances of complaints. Some RSPs are involved in IFAD's NPGP project and other projects in the target and neighbouring districts working with the communities. They have been very helpful in facilitating IFAD's Concept and Design Mission field visits to the concerned communities in all the three districts of Thatta, Sujawal and Badin. FAO is implementing a GCF project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management - TIBCRAWM" in Badin and IFAD Design had quite elaborate discussion and consultation with it during the Design Mission in November 2023.

39. After selection, PMU will hold detailed sessions with the implementing partners on the objectives, approach and methodology, target groups selection, development of umbrella village plans and infrastructure needs. Their expected role in project implementation under different components and activities will also be thoroughly discussed. Details about identification and selection of value chains, assisting the farmers and fisherfolk to achieve true production potential of their existing economic activity and get fair market return through access to improved inputs (including nutrient-rich varieties and self-produced inputs such as compost or biopesticides), production technology, climate change adaptation, affordable credit services, training, extension services, aggregation/grading and competitive markets will be explained. Engagement with the target groups, setting targets and development of work plans and implementation mechanisms will be discussed.

40. Some of the target communities have been visited with the purpose of assessing their current livelihoods situation and needs and discussing the expected SCRPs project. They included agriculture and fishing communities, existing cooperatives and businessmen.

41. However, further consultation is required concerning climate change adaptation and the measures for mitigating its impact in the agriculture and fisheries sector to be prioritized and implemented. Applying the targeted adaptation assessment methodology, the government departments, RSOs, and VOs will be consulted about possible adaptation measures also contributing to reducing exposure and sensitivity to climate hazards. A set of techniques and approaches derived from Climate Smart Agriculture, Agroecology, Marine Ecology and Aquaculture, and food processing will be assessed and prioritized for their implementation through the project toward smallholders.

42. The Project will deploy a comprehensive communication campaign at the start involving radio and televisual media, as well as electronic and print media to inform the potential beneficiaries about project approach, interventions, eligibility and roles and responsibilities. This will be further backed by PMU, Agriculture, Livestock and Fisheries Extension staff to inform the target cohort. This will be followed by IPs and Extension staff visits to target villages to organize the willing villages into partner VOs, as per the well-established process in prevailing social mobilization approach. Overall PMU district offices, agriculture extension, livestock and fisheries departments together with the implementing partners will be responsible for engagement and consultation with the VOs, interest groups about SCRPs interventions and their role in selection and implementation of schemes and activities.

43. Introductory and consultative meetings have already been held with the following stakeholders during the Design Mission to discuss the above and the selected adaptation measures.

- Planning and development department
- Agriculture department (Extension and Research, On Farm Water Management)
- Livestock and Fisheries Department

- Forest and Wildlife Department
- Irrigation and Drainage Department
- Coastal Development Authority
- Food and Agriculture Organization
- National Rural Support Program
- Sindh Rural Support Organization
- WWF

Support to VOs will start with a village wide consultative and participatory diagnostic of livelihood sources of various income groups, opportunities and constraints in raising incomes, women and youth situation and opportunities, favourable entry points, potential leaders and opinion-makers, socio-economic infrastructure endowments and deficits and then build on this information a holistic plan for formation of various interest groups and their livelihood support plans

Strategy for Information Disclosure

44. As discussed above, information was shared with the concerned stakeholders during the meeting for their information and feedback to IFAD. After SCRП approval by IFAD and Sindh government, the information including PDR, SECAP and GRM will be available to all from the PMU office, Project website and IFAD website. Similarly, anyone can request for required information from the Project office. SCRП will be presented to each target village at the start of the support phase.

Review of Comments

45. The observations and comments offered during the design was recorded and thoroughly reviewed by IFAD team and be addressed in the report as long as possible. Otherwise, sufficient justification will be provided for no or partial consideration.

RESOURCES AND RESPONSIBILITIES FOR IMPLEMENTING STAKEHOLDER ENGAGEMENT ACTIVITIES

Resources

46. SCRП will provide the required human and financial resources through PMU. Training needs assessment, planning, identification and hiring of experts or firms will be the responsibility of PMU. Some of the training courses under agroecology, CSA, salinity management, marine ecology, value chains identification and business plans preparation may be outsourced by PMU or through SMPs. Lessons learned and knowledge gained from FAO/GCF project "TIBCRAWM" will also be handy assets to be used by SCRП. The selection of RSOs and other partners will be based on prior experience in social mobilization, climate resilient infrastructure, CSA and fisheries management.

Management Functions and Responsibilities

47. As discussed before, PMU is the overall entity for the management and implementation of all activities. It will also have district level units in each of the three selected districts to manage the related activities. However, SMPs will be assisting and facilitating the implementation of adaptation measures directly or indirectly through expert consultants.

GRIEVANCE REDRESS MECHANISM

Objectives of the Project GRMs

48. The objective of the project GRM is to provide project stakeholders with accessible and inclusive means to raise issues, concerns and grievances and allow the project leadership structures to respond and act upon them in a timely, effective and transparent manner that promotes a good direct and indirect stakeholder relationship and a harmonious atmosphere.

49. The GRM will be a system by which queries or clarifications about the programme will be responded to, problems with implementation will be resolved, and complaints and grievances will be addressed efficiently and effectively. The purpose of the grievance redress mechanism is:

- 50. To be responsive to the needs of beneficiaries and to address and resolve their grievances;
- 51. To serve as a conduit for soliciting inquiries, inviting suggestions, and increasing community participation;
- 52. To collect information that can be used to improve operational performance;
- 53. To enhance the programme's legitimacy among stakeholders;
- 54. To promote transparency and accountability;
- 55. To deter fraud and corruption and mitigate programme risks.

Principles of the Project GRMs

56. The GRM is based on the following six guiding principles:

1. Responsiveness and Confidentiality

57. The GRM will entertain all types of complaints, comments and suggestions, with a view to protect beneficiaries from any risks related to the project implementation and improve the project's efficacy and efficiency. Comments and suggestions received will be given due consideration and the providers will be kept informed of the response to their inputs. In order to ensure transparency in handling and processing of grievances, all project stakeholders, especially complainants will be kept informed of the handling process and the outcome of the redress process in timely manner. As confidentiality is an integral part of fairness, the identity and personal details of complainants will only be disclosed to those involved in the resolution of the grievance.

1. Objectivity and Independence

58. The mechanism empowers the Grievance Redress Cell to operate independently and objectively while handling grievances and to ensure that 1.all information, stakeholders and records required for inquiry and analysis are easily accessible. To avoid any conflicts of interest the selection of Complaint Handling Officers will be made from the project / consultant staff / community members, identified at different tiers of the project structure and community groups.

2. Simplicity

59. Simple procedures will be adopted for logging complaint and/or submitting suggestions or comments (described below), to ensure the GRM is accessible and understandable to all project stakeholders especially marginal groups, poor farmers and female beneficiaries.

3. Fairness

60. The GRM will equally consider all complaints irrespective of their nature, size and complexity. All complaints, comments and suggestions received will be registered and the person or entity making the request for Redress will be acknowledged in writing. The project staff implementing the GRM will be specially trained for grievance handling and resolution.

4. Timeliness

61. All grievances, irrespective of their nature and size shall be considered and corrective actions taken within 25 working days. All possible efforts will be made to complete the process within the shortest possible time.

5. Participation

62. The GRM encourages any stakeholders to lodge complaints, make suggestions, including for improvement of the GRM. The GRM will ensure that project beneficiaries are included in the process of redressing grievances and incorporating suggestions where required. Matters concerning Environmental and Social Management and Involuntary Resettlement will be an integral part of the process.

Eligibility and Validity of a Complaint

63. A complaint is considered valid and will be processed by the GRM whenever:

- It relates to an on-going SCRP financed activity;
- It is filed by project affected individuals and/or communities, or their representative, who believe that they are or may be directly and adversely affected by the project.
- The complainant is not a direct affected beneficiary of the project, but the subject of the complaint affects him/her or their community;
- Complaints with inadequate details will not be rejected for lack of information; the project will seek additional information from the Complainant/s and then take a decision on eligibility.

Exclusions

64. The following types of complaints shall not be taken up for consideration:

- Anonymous complaints;
- Frivolous issues that are not related to the Project;
- Cases involving decisions/policy matters in which the complainant has not been affected directly/indirectly;
- Cases where quasi-judicial procedures are prescribed for deciding matters or cases that are sub judice;
- A grievance which has already been disposed of by the GRM unless new evidence is submitted; and
- Complaints about corruption which should be lodged and dealt with separately from this system.

Grievance Redress Process

65. The process will involve the following procedure and mechanism.

Grievance Registration Procedure

66. A GRM should be located as close to the people as possible to be accessible to the affected persons (APs) including vulnerable groups. Project stakeholders and APs will be able to use a variety of channels to access GRM. It is important to identify and make provisions for different means of entry into the grievance redress process, as it helps to increase the access of APs to the GRM. Multiple channels can be used for presenting complaints. A grievance or a complaint can be registered in four ways; (1) Direct hard copy to the concerned office, (2) project website, (3) sending SMS or WhatsApp messages and (4) email. All the four facilities will be available after project offices are established, staff recruited and designated and communication channels are established. SMPs offices in the concerned districts will also receive complaints directly from the communities or through above mentioned ways. The Project will develop a standardized Form for complaints/comments to be available in the offices and on website. The required addresses, cell numbers and emails will be publicised in the project area and displayed

in the concerned offices. The GRM procedure, focal persons for receiving and responding to the grievance, timelines for redressal and guarantee of confidentiality will also be shared.

67. The receipt of complaints is key and hence a simple and understandable procedure is adopted for receiving grievances, suggestions and comments relating to the project. The complainant may submit, containing his/her personal information, suggestions and/or comments on a simple paper, to the (i) PMU office in Karachi, (ii) DCU/SMP office in Thatta, (iii) DCU/SMP office in Sujawal, (iv) DCU/SMP office in Badin. Usually, the concerned office should have a Focal Person for receiving and registering a complaint/suggestion/comment or the Aggrieved Person/Complainant can drop his/her written complaint, suggestion/comments in a Box placed at a visible location for the purpose in the office. Complainants will be encouraged to use the standard format that will be available at every office/outlet mentioned above.

68. The Project will ensure that any person either in his personal capacity or representing a group of complainants and/or entities that files a grievance will be made aware of the grievance mechanism. The Project will facilitate tracking, evaluation and response to grievances.

69. A project GRM awareness campaign will be launched in print and electronic media. This will include distribution of brochures (in local languages), signboards in the vicinities where project interventions will be executed and in print media. The contents of these hoardings may include but not limited to the following:

70. All grievances, suggestions/comments etc. will be recorded in a Grievance Register by the Focal Person(s) / Complaint Handling Officer within two (2) working days of the receiving of the grievances. A unique number will be assigned to each grievance, suggestions and comment. In addition to lodging a grievance/suggestion/comment in the Grievance Register, the same shall also be uploaded in a dedicated database to be maintained at Project Web Portal, which can only be accessed by Project Director or any of his assigned representatives.

71. The Focal Person will formally acknowledge the receipt of grievance within five working days of the submission of grievance and will inform the complainant that the Project will respond within 20 working days. It will be ensured that all such acknowledgements, verbal or written are recorded in an appropriate manner to ensure a record of correspondence. Acknowledgments should include a summary of the grievance and an estimated time for response/resolution.

Grievance Redress Mechanism

72. The mechanism involves a hierarchical order starting from the field or district level Grievance Redress Sub-committee (GR Sub-committee) to the PMU level Grievance Redress Committee (GRC) to the Steering Committee (PSC) as shown in Figure 2. Usually, complaints and grievances should be resolved to the satisfaction of the complainant/aggrieved person at the concerned DCU Sub-committee level otherwise, it will be referred to the GRC which should decide and resolve the issue. The complainant can appeal to the Steering Committee through GRC if he/she is not satisfied with the decision of GRC.

Roles and Responsibilities of Grievance Redress Committees

Project Steering Committee

73. The Project Steering Committee (PSC) will act as the Apex Forum to hear and adjudicate on appeals against GRM decisions. Pending cases shall be presented by the Chairperson of GRC to the Project's Steering Committee. The PSC will review and resolve any appeals against the Grievance Redress Committee. Appeals must be lodged with the GRC for submission and reporting to the PSC.

Grievance Redress Committee

74. The Grievance Redress Committee (GRC), constituted at PMU Level and chaired by Project Director, will have the following mandate:

- Resolving and addressing complaints not resolved at GR Sub-Committee
- Reviewing appeals lodged against the resolutions of GR Sub-Committees

Considering and determining corrective measures in the light of comments and suggestions received by GRC and/or recommended by GR Sub-Committees
Monitoring GRM handling by GR Sub-Committees and reviewing resolutions suggested to them.
Notifying members of GR Sub-Committees
Analyzing data on grievances and using this to make informed decisions
Reporting to PSC unresolved grievances at GSC level

75. The GRC will be the highest forum within the project for redressing the grievances received from the beneficiaries, stakeholders and other concerned. The committee, while handling a complaint may requisition any staff for its assistance and/or may constitute a special committee if required.

Grievance Redress Sub-Committees (DCU level)

76. The GR Sub-committees will be established at the three DCUs (Thatta, Sujawal and Badin). These Sub-Committees will be responsible for redressing complaints, grievances and suggestions in their respective areas and will forward unresolved complaints and unattended suggestions / comments to the GRC. A Focal Person in each DCU office will be responsible for collecting, registering and handling complaints, suggestions and comments that are submitted.

Verification of Complaint/Investigation/Redress

77. Once a complaint and/or suggestion / comment has been forwarded to the GRC or Sub-Committees, the Chairperson of the Committee will nominate a committee member to verify the issue and/or analyze the suggestion / comment prior to a thorough investigation, and to prepare a working paper for consideration of the Committee / Sub-Committee in its meeting. The investigations will include collecting and reviewing relevant documents, making site visits, consulting appropriate internal staff, contacting external stakeholders, interviewing the complainant as appropriate.

78. The Committee and Sub-Committee will meet as often as required to handle complaints and suggestions. The GRC and its Sub-Committee will ensure attendance of complainants at meetings as observers to ensure transparency. The GR Sub-Committees, in case of complaints pertaining to social and tribal issues / conflict, may redirect complaints for redress through the local elders if required, or they may invite such elders to their meetings for facilitation and assistance.

Right of Appeal

79. If a complainant is dissatisfied with and/or unwilling to accept the resolution of the GRC or its Sub-Committees, he/she may approach the appellate forum for review. The appeal committees will review the case and determine if further action is possible. Once all options for corrective actions have been explored and no further action is deemed appropriate, a written notice will be sent to the complainant advising that his/her grievance case is closed. In cases where appellate forum is PSC the complainant will be asked in writing to submit a written appeal along with the reasons for not accepting the resolution of GRC, for submission to PSC for issuing a final decision into the matter.

Figure 1. GRM redress mechanism.

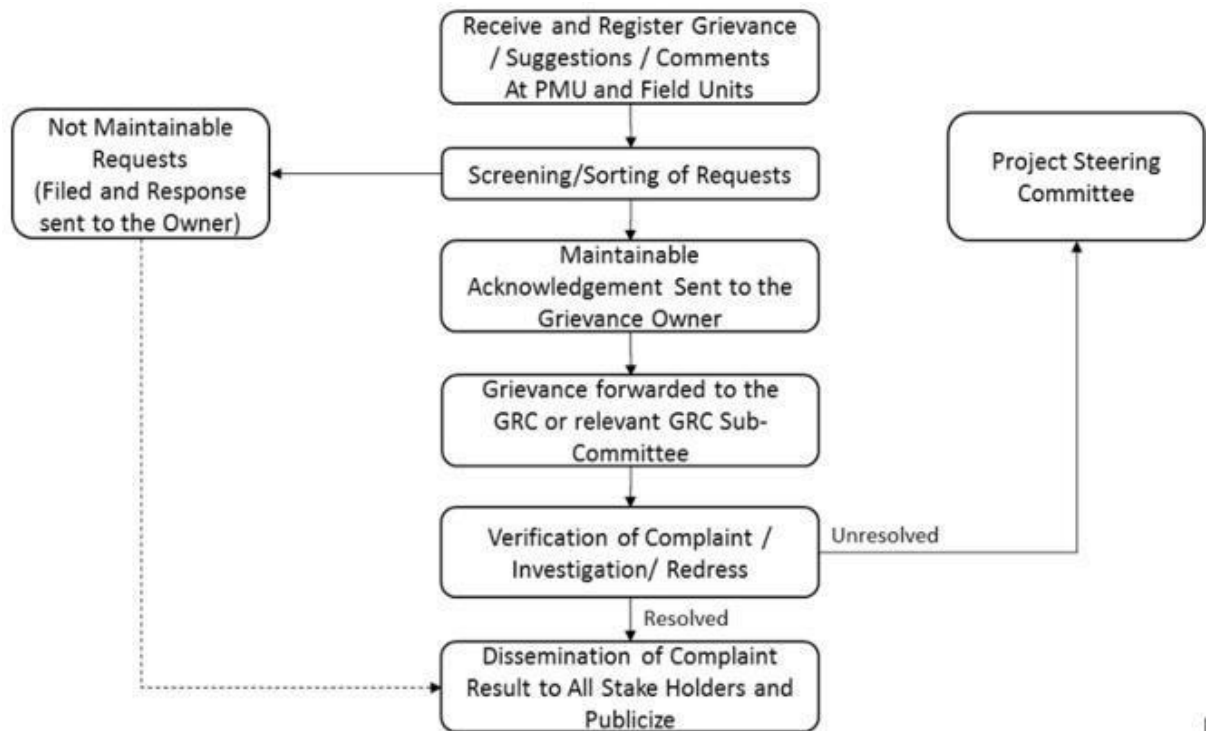


Figure 2. GRM process from complaint registration to final resolution of complaint.

MONITORING AND REPORTING

Involvement of Stakeholders in Monitoring Activities

80. As discussed above, the stakeholders will be involved throughout the process from verification of the complaint/grievance to the resolution and conclusion of it. In case they are not satisfied, the right of appeal has been provided at GR Sub-Committee and GR levels. Also, community elders may be involved during the proceedings for transparency purposes.

Reporting Back to Stakeholders and Feedback

81. Once the redress process is completed and the GRC and/or GR Sub-Committee has reached a conclusion, the result will be communicated to the complainant and concerned stakeholders. The results of the redress process will be uploaded to the project website. Besides communicating the results to the Complainant, the Focal Person(s) / Complaint Handling Officer will also record the information pertaining to the decisions of the Committee(s) in the grievance register and corresponding grievance database. The actions suggested by the GRC or Sub-Committee will be communicated to the concerned person(s) and will be recorded in a register.

82. The complainants will be informed of the proposed resolution in writing, and if need be, the same can be explained over telephone or in person to his/her satisfaction. If the complainant is not satisfied with the resolution, he or she will be informed of further options, which would include pursuing remedies through avenues afforded by the Pakistan's legal system.

83. The written response will clearly outline the course of action the project has undertaken to redress the grievances and the specific terminal date by which the recommended remedies shall be completed. Potential actions will include responding to a query or comment, providing users with a status update, referring the grievance to another level of the system for further action. The project will take action on every grievance. The Affected Person shall provide a written response agreeing or disagreeing with the proposed course of action within two weeks period after receiving the recommended actions.

Regular Review of GRM Process

84. GRC will conduct quarterly and annual review of the GRM process to ensure that all registered complaints and grievances have been resolved and actions taken. It will also check for compliance with the process, any gaps and improve the process. The following Table shows the objectives and monitoring indicators of the quarterly and annual reviews.

Period	Objectives	Indicators
<p>Quarterly review of quantitative indicators</p>	<p>To assess if grievances are correctly screened and classified</p> <p>To assess if suggestions / comments are property identified and classified</p> <p>Identify trends in Grievances</p> <ul style="list-style-type: none"> · To ensure grievances are being addressed 	<p>§ Number and type of grievances received</p> <p>§ Number of grievances redressed by GRC and the three Sub-Committees.</p> <p>§ Repeat of grievances from same stakeholders</p> <p>§ Repeat of grievances from several stakeholders</p> <p>§ Timeframe for closure of grievances</p> <p>§ Number of comments accepted and corresponding actions taken</p> <p>§ Number of suggestions received and accepted</p>
<p>Annual review of grievance redress process</p>	<p>To assess the compliance with the GRM</p> <p>To evaluate progress with achieving results</p> <ul style="list-style-type: none"> · To identify improvements and update grievance handling and redressing procedures 	<p>§ Compliance with the GR process</p> <p>§ Completeness of grievance log and register</p> <p>§ Number of grievances received by type</p> <p>§ Number of grievances resolved</p> <p>§ Number of appeals received</p> <p>§ Number of appeals resolved</p> <p>§ Qualitative assessment of stakeholder awareness of grievances mechanism.</p> <p>§ Number of suggestions/ comments accepted</p>

2.

BUDGET

A sufficient budget should be dedicated to the GRM as part of the Project implementation cost.

134. Annexure-22: Targeted Adaptation Assessment), grading and packaging, aggregation and marketing, value addition/processing, post-harvest loss reduction, off-shore/inland aquaculture (fish, shrimp, crab), use of safe and sustainable fishing gears to prevent entanglement of and damage to marine life, farm services provision, off-farm income generation, traditional crafts, financial literacy, nutrition etc.

135. Trainings and demonstration will be implemented by implementing partners staff and public sector extension agencies as appropriate. PMU, in consultation with concerned service providers, will develop guidelines and curricula for each type of training and demonstrations as well as budget. Interest groups will be supported for two to three cropping seasons for sustainable adaptation of the proposed interventions. Project will adapt training of the Badin extension service on climate smart agriculture (as part of the FAO/GCF project “Transforming the Indus Basin with Climate Resilient Agriculture and Water Management 2020-2026”) as part of its efforts to promote climate smart agriculture.

136. **Youth inclusion, GEWE, Nutrition and Climate adaptation:** Village plans will pay specific attention to the four mainstreaming themes. All the envisaged activities and structures under SCRP at village level will be screened to build connections with the four themes to possible extent. Within the target group of SCRP, particular constraints and needs of women and youth are addressed by the VOs and Interest Groups, to ensure that not only are they effectively able to participate but also to benefit. Where feasible women only Interest Groups will be established. All VO development plans will be subject to environment and climate adaptation screening, not only in terms of risk, but also in terms of agricultural practices and resilience. Opportunities for improved nutrition for local communities will be sought under the value chain/interest groups plans. Trainings and capacity building for VO managers and members will pay specific attention to GEWE, nutrition, dietary diversity, WASH and production of nutrient rich commodities as part of value chain approach or through additional activities like kitchen gardens. Collaboration will be sought with relevant ongoing programmes like PINS for nutrition education and supplementary assistance in target communities. **Detailed guidelines and curricula will be developed by the implementing partners, including budgets, for each type of training.**

137. **4Ps- Agri-business Development Partners.** The objective of this intervention is to promote value chain development in partnership with private sector on the basis of win-win relationship between the producers and private sector buyers. This will in particular focus on high value crops, fisheries/aquaculture and dairy/livestock. Lessons learned in ETI-GB and GLLSP-II will be reviewed in early phase of the project to develop an appropriate approach. The project will develop 20 “4Ps”, with a minimum of 2000 (on average) producers per 4P. The project will make a call for proposals, open to local, national and multinational private firms/companies already in the business and with financial capacity as well as demonstrated market share.

138. Partnership proposals will be developed by PMU’s Value Chain Experts in collaboration with the IPs professional value chain staff for promising products and EOI will be invited through advertisement from private sector. The Agri-business development partner will provide database of farmers (including their CNIC, phone/mobile numbers and addresses) as well as the geo locations of all participating farmers for tracking the farmers. This will facilitate to develop a network of all participating farmers resulting in developing better connections and will pave the path for adoption of smart technologies in future. The agribusiness development partner will provide progress reports, data, case studies, complete profile of 4PS and will actively cooperate and facilitate monitoring done by SCRP District and PMU M&E teams as well as third party monitoring and evaluation.

139. Producer-Public-Private Partnerships (4Ps) involve cooperation between government, private sector business, agents and small-scale producers, who agree to work together to reach a common goal or carry out a specific task while jointly assuming risks and responsibilities, and sharing benefits, resources and competencies. It is a holistic win-win platform where multiple partners could leverage their investment in selected value chains led by private companies facilitating access to markets,

knowledge, technology and capital for smallholder rural poor farmers. In addition, such platforms could create employment opportunities in rural areas. A classic 4P is based on:

- I. To the extent possible and relevant, the private-sector partner is selected through a competitive or rigorous selection process that ensures transparency and objectivity, and meets the project’s social, economic and environmental objectives.
- II. Producers play an active role in the negotiations and partnership arrangements (both formal and informal), governance and monitoring.
- III. A 4P is a true partnership in which each partner has clear roles and responsibilities, and shares risks and benefits. Private-sector partners are expected to allocate matching financial resources.
- IV. Linking with the private sector through a 4P ensures that interventions are sustained beyond the project lifetime because they follow business logic and all involved parties’ benefit. A 4P should be seen as an entry point to scaling up project results through private-sector investment.¹⁰

¹⁰ How to do, Public-Private-Producer Partnerships (4Ps) in Agricultural Value Chains, (IFAD, 2016)

Table 1. Key actors/entities directly involved in establishment and implementation of 4Ps

Actor/Entity	Level of Establishment	Key Role/Engagement
Farmer/Producers	Village Level	<ol style="list-style-type: none"> 1. Responsible for forming the producer organizations ¹¹on common commodity lines/Selected value chains. 2. Use own capital or avail project provided subsidized credit for inputs. 3. In kind contribution in the form of Labor 4. Commitment to not side sell in case of forward sales agreement is reached with 4P actors. 5. Contribute to local assessments and analysis, for example explaining their practices (pest management, soil fertilisation), constraints (land tenure) and expectations (contribute to the design of VC plans) 6. Participate and undertake technology transfer to enhance production quality and quantity. 7. Horizontally collaborate with producers in their vicinity to gain mutual benefits. 8. Participate in group activities like training, demonstration etc. 9. Contribute any cash or kind share in production group determined by group or required under agreement with the buyer
Producer Organization/ Interest Groups of small holder farmers and fisherfolk	Village or group of villages in contiguous geographical area	<ol style="list-style-type: none"> 1. Arrange collective quality and sustainable input supply for members. 2. Production planning based on demand and supply advice from the private sector partner. 3. Aggregate farmers produce and engage in primary processing activities (cleaning, sorting, weighing & packaging etc.) 4. Collection of cash after the harvest from producers and paying back to the credit providers or private sector partner
Interest Groups of landless and youth benefiting under component 2	Village or group of villages in contiguous area	<ol style="list-style-type: none"> 1. Organize around a joint business plan for the products or skills acquired through project help 2. Enter into collective contracts for inputs and sale of outputs 3. Aggregate output, ensure quality and timeliness of delivery 4. Collect sale proceeds, defray input costs and credit expenses and distribute the rest among members.

¹¹ These PFOs will be in addition to the ones established under sub-component 1.

Actor/Entity	Level of Establishment	Key Role/Engagement
4P Promoters (SMEs & Large Scale Private Agribusiness Companies)	Village, District, Provincial and National Level	<ol style="list-style-type: none"> 1. Secure the market for producer organizations' aggregated produce through forward sales contracts. 2. Support producer organizations to disseminate technology related to productivity & quality enhancement of farmer produce climate adapted practices through training & development (extension support). 3. Establishment of necessary infrastructure to facilitate market access and value addition of farmer produce. 4. Assist producer organizations to obtain related quality certifications as per the market standards.
Financial Institutions (FIs)	District & Provincial Level	<ol style="list-style-type: none"> 1. Facilitate fund/credit delivery to producer organizations and make member farmers bankable. 2. Develop partnerships with 4P promoters and route payments for farmer produce through bank accounts. 3. Facilitate payments for procurement related activities through producer organization bank accounts.
Public Sector Services	District and Provincial and National level	<ol style="list-style-type: none"> 1. Extension services including farmer training and access to certified inputs. 2. Training and demonstrations on improved production practices and technologies 3. Implementation of climate resilient production systems and crop rotations 4. Certification support. 5. Favourable Policy and Conflict resolution

140. The project will establish 20 Producer Public Private Partnerships (4Ps)—each covering an estimated 2,000 producers. PMU with assistance from IPs and extension agencies will pre-identify the promising clusters for 4Ps development once a critical mass of interest groups in a define region is achieved and goals of improved production and productivity defined under production/interest groups plans have been achieved. PMU would act as the initiator to invite expressions of interest (Call for proposals) to engage Private Agribusiness companies/SMEs in 4Ps, who are then short listed and selected based on a set of criteria and commitment and interest in pro-poor development. These partners are subsequently requested to submit proposals in the form of Business Development Plans (BDP) which include an investment plan and an implementation plan.

141. PMU will examine the feasibility of submitted proposals, confirming marketing, technical, management and financial viability. The producer organizations are also pre-identified by the IP and partner extension agencies. The business proposal then undergoes a final appraisal by Business Proposal Evaluation Committee (BPEC) established in PMU consisting of three permanent members from within and co-opted experts from within government or private sector depending on the nature of proposal. The BPEC may undertake further field visits, if necessary, to validate the appraisal. At this stage, economic, social and environmental feasibility and pro-poor strategy of the proposal is validated and approved by the committee. During BPEC evaluation, all finalized, and duly approved specifications

endorsed by respective experts/line agencies for agreed machinery/equipment, and also drawings and BOQs of infrastructure etc. should be submitted by the potential for technical evaluation and recommendations. And final plan is submitted to IFAD for NO objection. Procurement will be carried out through community procurement processes with technical backstopping of IPs.

142. Prior to launch of activities, formal tri-party Agreements between the private sector promoter, producer organizations and the project shall be signed. Following the signing, the promoter undertakes the mobilization, organization and sensitization of the producer organization in collaboration with the concerned IPs and extension agencies. In general, the 4P promoter provides technical assistance and extension services to improve farm productivity, coordinates and facilitates the input/equipment supply, and agrees to procure farmer produce or output through collection or processing centres established under producer organizations. If the established partnership requires further support, DCU would facilitate and assist the provision of technical assistance & the extension services through related agencies.

143. Capacity development of producer organizations, 4P mobilization support and monitoring & evaluation (M&E) activities of the established partnership would be undertaken by PMU with the assistance of IPs through the coordination of DCUs. Number of extension services field officers to be appointed for each 4P will be negotiated at an early stage of BDP. Training on production technology, inputs, quality control, financial management, and Good Agricultural Practices (GAP) will be provided by private sector partner in collaboration with extension agencies. However, the 4P business plan should clearly identify the need for additional support that could be provided by provincial or district level public agencies, and how this support could be mobilized; it is however expected that the PMU/DCUs would play an important mediator and coordination role, ensuring the multiple and relevant public institutions are mobilized and connected to the project interventions, providing support where necessary. Monitoring and evaluation of the 4P implementation is a shared responsibility by IPs and the partner companies, with guidance and oversight provided by the PMU/DCUs. Entire process of partnership development and implementation is explained in details below.

a) Identification & Selection of Private Sector Partners

144. Expression of Interests (EOIs)/Call for Proposals from Private Agri-business companies/SMEs intended to participate in the component activities would be invited. Such entities would be selected on the basis of parameters and criteria acceptable to the GoS and IFAD as mentioned below:

- i. Be incorporated in Islamic Republic of Pakistan or should be a multinational having registered operations in Pakistan and willing to work with farmer organizations.
- ii. Minimum of five (5) years of direct involvement in Agri-business ventures including agriculture, processing of agricultural commodities and/or deal in agricultural products or services.
- iii. Sound financial position as evidenced by its' balance sheets with unqualified audit opinion for minimum of 2 (two) previous financial years.
- iv. Capacity to provide significant co-financing and technical expertise and demonstrated long term marketing capability. In the case of SMEs, Volume of produce to be bought should be secured through a bank guarantee to avoid last minute default in terms of not being able to buy or payment delay.
- v. Reputation of fair dealing and empathy with farming communities and the poor, sound management and corporate governance systems.
- vi. Comply with the relevant environmental regulations, and climate-smart agricultural practices.

b) Identification and selection of FOs/farmers

145. IPs will identify clusters of villages and interest groups with a promising produce and production capacity that can benefit from a 4P arrangement and has the potential to bring additional private sector investments and technical support, has a market demand and can result in improved incomes for the participating FOs and their members. Such clusters of villages and interest groups will be assisted to organize themselves and should undergo a capacity development Programme through IPs prior to 4P commitment with Private Agribusiness Companies to ensure that these FOs and members clearly understand the nature of intended partnership and obligations. Such entities should be registered under Registrar of Cooperative Societies, GoS or with any other acceptable Government organization. The assessment and selection of these FOs would be on the basis of willingness to work together as an organization, willingness to establish an internal organizational structure and systems conforming with the requirements of the registering body, number of members, produce volume, demonstrable market demand and comparative advantage.

c) FO Capacity Building

146. Prior to float of expression of interest, following activities will be completed at FO level to ensure that it operates as a formal functional organization and is able to perform its part of deal in future 4P.

Governance

- i. Selection of executive committee
- ii. Arrangements of meetings and AGM
- iii. Decision making process
- iv. Record keeping
- v. Membership participation in meetings

Performance of VOs/Interest Groups in SCRP financed Interventions

- i. Activities related to agriculture development carried out in the recent past
- ii. Responsiveness to IPs and extension agencies advice and interventions
- iii. No. of members benefitted
- iv. Internal social and organizational coherence and absence of actual and/or potential internal conflicts
- v. Level of spirit of democracy

Management of finances

- i. System for financial management
- ii. Agreement on Membership fee
- iii. Financial management and decision-making process

Feasibility of the proposed project intervention

- i. Number of members benefitted
- ii. Scale of operation
- iii. Investment capacity of the FO /Producer group
- iv. Proposed arrangement for establishing market linkages

d) Partnership Development

(1) Step 1 - Inviting Expression of Interest

147. Invite EOIs in the form of “Concept Paper” through an advertisement in all the two languages (Urdu and English) widely circulated (among business community) newspapers. In addition, the advertisement will be posted in online portals including project/P&D official website, social media sites. Promotion through official forums would also be entertained. All the EOIs, as per the prescribed format (**Annexure-6: Template for Expression of Interest (EOI/Concept Note) Stage**), in response to advertisement would be required to be submitted, together with the supporting documents, directly to the PMU within the prescribed time period mentioned in the advertisement. EOI acknowledgement letter should be sent to respective parties within a week.

148. The advertisement should provide the following basic information.

- i. Brief description about overall Programme and objectives.
- ii. Components and scope
- iii. Eligibility criteria
- iv. Desired outcome
- v. Reference to the concept note template (Detailed template for the concept note will be available to download in programs’ official online portals or/and can be obtained upon prior request through an email or via post.)
- vi. Required supporting documents.

149. A Concept note for the selected 4P will be prepared by IP staff that shall be made available to entities participating in EOI exercise. The Concept Note shall cover:

- i. Description of proposed 4P project: Selection of the commodity, potential for value addition at producer level and for premium product differentiation (trademarks, labelling, certification, organic). Importance in buyers’ overall activities, prospects in final or retail market. Export potential etc.
- ii. Target group description: Farmers with at-least 80% of land holdings below 16 Acres.
- iii. Geographical coverage: Agro-ecological, commercial and/or social reasons for choice of area highlighting the importance to the area as well as to the country as a whole due to intervention.
- iv. Farming, fishing and agro-processing practices description (productivity and environmental baselines): Assessment of the current practices in terms of pest management (use of chemical pesticides and biopesticides in quantity and quality); soil fertility strategy (use of including organic and chemical fertilizers in quantity and quality, soil analysis including organic matter); water management (water logging, irrigation in volume and quality), food losses (volume and recovery); feeding, animal health and breeding (for livestock, poultry and aquaculture); input provision (self-production, local provision, quality); power energy; by-products (recovery and disposal); occupational safety risks; land access/land tenure; access to services; self-evaluation on climate sensitivity and adaptative capacity. This assessment will be based on consultation with farmers and agro-processors (participative approach to reflect on current practices, bottlenecks and opportunities), and ad hoc analyses (e.g. soil analyses).
- v. Socio-economic distribution activities in the VC (socio-economic baseline): share of youth (both sex), women, men; occupational specialisation (by age and sex); decision making process; modality of access to occupational position.

- vi. Present production and market situation in the selected area: Key statistics of national & regional production of selected commodities, current market situation with import and export data and relevance for import substitution and national economy.
- vii. Proposed 4P project activities: Establishment/expanding of partnerships with FOs, promotion of primary processing at the FOs level, Development of infrastructure to facilitate post-harvest handling and collection or equity sharing with FOs through process modernization and value addition at factory/Processing level etc.
- viii. The farmer selection criteria:
 1. 80% of the rural farmers having land parcels less than 16 Acres.
 2. Willingness to share experiences with other farmers
 3. Willingness to work with private Agribusiness companies
 4. Trustworthiness
 5. Existing Members or willingness to work in groups/join FOs
- ix. Implementation plan: Clear timeline for partnership implementation including time frame for proposal development & relevant approvals, farmer selection, group formation, creating bank linkages, supplier selection and procurement for goods and services, field level implementation according to crop seasons and patterns etc.
- x. Cost of the project and financing plan: Proposed investment for the partnership including contributions from each partner (companies, farmers and SCRPs) and financing plan aligned with proposed activity/implementation plan.
- xi. Benefits of the project: Desired outcome of the partnership in terms of economical (incremental income of farmers), social and environmental aspects due to proposed intervention.
- xii. Impact of the partnership: Overall impact of the partnership in long run aligning with Sustainable Development Goals (SDG) highlighting the effect on economic, social and environmental aspects and the attainment of SCRPs objectives.
- xiii. Sustainability of the partnership: Propose long term sustainability mechanism of the partnership with a clear exit strategy from SCRPs.

(2) Step 2 - Seek detailed proposals

150. Selected private Agribusiness companies/SMEs based on their EOIs are requested to develop detailed proposal with the support of IPs according to the provided proposal development template (**Annexure-7: Template for 4P proposal development**). The template should be available in PMU and DCU offices and at SCRPs website. At the same time, shortlisted companies/SMEs would be invited to present their concept to PMU/RCUs while an awareness session would be conducted by the IPs experts. The awareness session would comprise of:

- i. Overall awareness and guidelines about the proposal development
- ii. Guidance for implementation of the 4P projects.
- iii. Guidance for selection of works, goods & services including endorsement requirements by relevant parties, after sales service, disbursement procedure, ownership of utensils, equipment, machinery and infrastructure facilities etc.
- iv. Guidance for improved social inclusion in the VC. The GEWE and Youth inclusion pathways in section II.K, page K15 provides suggestions and guidance.

- v. Proposed training, extension services (including access to agrometeorological services), input (access and self-production) and equipment for climate smart agriculture and climate smart agro-processing (aiming at improving productivity, reducing environmental impacts and mitigating climate risks). **The Climate Adaptation pathway** in section II.K, page 15 and **SINDH COASTAL RESILIENCE PROJECT**

SOCIAL, ENVIRONMENTAL AND CLIMATE ASSESSMENT PROCEDURES (SECAP)

STAKEHOLDERS ENGAGEMENT PLAN (SEP) & GRIEVANCE REDRESS MECHANISM (GRM)

JANUARY 2024

INTRODUCTION

Project Rationale

85. Pakistan is the world's 5th most populous country with a population of 240 million inhabitants (2022 census) out of which 63 percent is rural. Sindh is the second most populous province in Pakistan with a population of 55.7 million. Sindh has a well-developed agricultural base supported by an extensive irrigation network on the Indus River. With its 350 km coastline, Sindh has 48 percent share in fish export from Pakistan. Agriculture contributes 24 percent to Sindh GDP and generates 70 percent of the employment. Livestock and fisheries contribute over 50 percent of the agriculture GDP of the province. The poor derive 56 percent of their income from agriculture. Livestock provides critical income security for many rural households and is of particular importance to women. People lack clear land tenure rights and most of the poor smallholders depend on landowners and middlemen. In addition, the sector is facing alarming ecosystem degradation due to pollution, deforestation, and upstream massive water withdrawals in the Indus basin, leading, among others, to sea intrusion and salinisation. Climate change raises smallholder vulnerability, with episodes of heatwaves, floods, and cyclones in the arid context of Sindh coastal area.

86. Despite its resource endowments, Sindh is afflicted with large pockets of endemic poverty, particularly in rural areas. In Sindh, about 30-35 percent of the population lives below the poverty line. The prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively and exceed the national averages of 20 percent and 40 percent respectively.

87. IFAD will be financing the Sindh Coastal Resilience Project (SCRP) in the three poorest districts with a population of 3.87 million/697,262 households or 7 percent of the provincial population. The three districts namely Thatta, Sujawal and Badin are recognized as the most deprived and under-developed with a multi-dimensional poverty headcount respectively of 86, 85, 82 percent. Of the landowners, 84 percent own less than 25 acres. A very small population of the three districts own land which is 2.2% households in Thatta, 0.4% in Sujawal and 4.3% in Badin. Small holdings, traditional low input low-output production systems, lack of access to technology, services and financial services, and small and scattered marketable surpluses keep performance of smallholder farming below potential. Coastal fishermen communities are the most deprived in terms of productive assets and social infrastructure/services. 76 percent rural households are landless and work as tenants/sharecroppers and working on land owned by a large landowner as tenants.

Project Development Objective and Project Components

88. The Project development objective is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and services; (ii) Increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilitates access to natural resources and support services.

89. Project Components: SCRП will have an inclusive approach to transformation of economies and incomes in the target rural communities. The project consists of three complementary components that address the causes of poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.

90. Transformation of Coastal Rural Incomes: Rural communities organized and assisted to develop capacities for market oriented improved productivity and production and value addition and transition to higher value outputs/products based on structured value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.

91. Economic and social Inclusion of Disadvantaged Groups (job market and value chain participation facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored enterprise development and technical and vocational service provision).

92. Project Management and Policy Support: Establishment of an efficient project management structure (a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing in buffer zone etc.).

Purpose of the SEP

93. The purpose of this Stakeholder Engagement Plan (SEP) is to prepare a strategy and a plan for consultation with the Project stakeholders, obtain their perception and feedback on project interventions, proposed mitigation and adaptation measures to address the potential project risks, and their views and recommendation on the Project interventions. SEP is also a lever to ensure the project meet the needs of the population and involves them fully.

OBJECTIVE OF SEP

94. The SEP is aimed at consulting about Project information concerning objectives, interventions, outcomes and impacts on the target communities including climate change and environmental impacts and obtain their feedback on the overall implementation and mitigation plan for the project. The consultation process will provide the stakeholders with an opportunity to inform and influence decision-making on the project interventions including effective grievance redress procedures. Stakeholders' engagement will ensure transparency in project activities and create a sense of ownership among all concerned.

STAKEHOLDER IDENTIFICATION AND ANALYSIS

Affected Parties

95. SCRP will involve and affect many people. Small holder farmers, fisherfolk and landless poor of Thatta, Sujawal and Badin districts will be affected and engaged directly under different interventions including value chains, infrastructure, financial services, extension and skill development services provision.

96. These smallholders will be reached via Villages Organizations. The village development roadmaps to be prepared for the development needs of the concerned villages, will identify various interest groups based on their material and natural endowments, development potential, orientation and preference. These groups will be identified and formed during project implementation, examples include: farmers through crops production interest groups; women and farmers through livestock interest groups; fisherfolks interest groups (leading possibly to aquaculture); traditional crafts production/marketing interest groups, etc.

97. Each interest group will range from 30 to 40 members and each Revenue Village will, on average, have around 10/12 interest groups. Women and youth representation and participation in VO management and subgroups will be ensured. Mixed interest groups of men and women will be established as much as possible when socio-cultural norms allow. In other cases, Women only interest groups will be promoted especially in dairy, small ruminants, processing and value addition and traditional crops. In addition, Youth groups (combining young women and men) will also be set up to ensure that youth can meet, discuss their situation, and challenge, and build up strategies to better link with established adult groups and stakeholders, as well as to develop their own capacities and vision. It could be very promising to mobilize young people for village assessments and analysis under the supervision/guidance of support organizations to provide methodologies and ensure a strong empowerment.

98. All these subgroups must consider the mainstreaming themes (Climate, Ecosystems, Nutrition, GEWE and Youth Inclusion) in their collective and/or individual business plan: how each group integrated each theme as a source of opportunity and strength?

Other Interested Parties

99. The current and usual socio-economic partners of smallholders are landowners, middle-men and inputs suppliers. The purpose of the project is to enable smallholders to become more independent from the latter (longer-term land agreement; better access to formal financial services, better access to good quality inputs). Thus, while landowners, middle-men and input suppliers are not the targeted beneficiaries of the project, obviously, they will be impacted by the project and may slow-down the results. This is the reason why it is recommended for SCRП to develop contacts with landlords, middle-men and input suppliers, explain the objectives of the project, and explore the long-term interests they may have with enhanced smallholder livelihoods, and climate smart agriculture. Under any circumstances these stakeholders should directly benefit from the project, but they shouldn't adversely affect the impacts of the project.

100. The provincial government departments at the province and district level including Planning and Development, Agriculture Extension and Research, Fisheries, Coastal Development and Local Government will be involved in the Project implementation. Other non-government implementing partners like rural support organizations (RSOs) and NGOs will also be involved.

101. Both public services and NGOs should be trained as part of project implementation to better play their role in supporting smallholders and poor households. IFAD and ADB as financing agencies have an essential role to play. PMUs and implementing partners from other projects in Sindh will be, depending on the aim, approach and geographical implementation, involved to foster cooperation, capacity development and more integrated support.

102. At the provincial level, GoS will receive policy support in view to set up an enabling environment pro-poor households and smallholders.

Disadvantaged Groups

103. SCRП has identified disadvantaged groups including landless, women from BISP beneficiary families, and male and female youth from households with poverty score 0-32.

Analysis of Stakeholders

104. Majority of the target districts' population involved in agriculture is either smallholder or has no land and is dependent on landlords and middle-men. Similarly, most fishing communities work on others' boats as labourers and helpers with limited or no economic space for themselves. They are mostly indebted to the landlords, boat owners and middlemen which is almost an endless process continuing for decades. Because of this situation, they are highly vulnerable to climate change impacts and recurring natural disasters like floods, high tides, sea level rise and cyclones coupled with ecosystem degradation. Sea intrusion, degraded soils due to salinity, saline groundwater, shortage of water for irrigation due to excessive withdrawals upstream during peak periods further add to their perils. SCRП will help build their resilience to cope with these disasters and support them in developing and improving their economic wellbeing.

105. This diverse group represents SCRП stakeholders ranging from directly affected and benefited people to many indirectly benefiting communities. Those who are at the receiving end are those with a small source of income like smallholders and fisherfolk while there are others who have no regular source of livelihood except seasonal or occasional daily wages. Poor women and youth with meagre livelihoods and no or poor skills are making a good part of the target beneficiaries. The mobilization and development of these communities to effective and efficient village organizations (VO) will be a key to achieving the objective of the Project. A diligent needs assessment and implementation of the proposed village development plans will depend upon proper mobilization and capacity building of the VOs.

106. The expected interest groups will have varied interests according to their choice of business like agri inputs supplies, dairy, fish, grading, marketing, processing and packing, etc. However, they will need to be supported in proper orientation and inclusive and participatory business plans development leading to improved agency and empowerment.

107. The more important group of implementing departments from the provincial government like Planning and Development (Project Management Unit) , Agriculture, Fisheries and Coastal Development Departments village organizations (VOs), RSOs and NGOs as Social Mobilization Partners (SMP) , make another group of stakeholders whose role will be crucial to the success of the Project. Capacity and previous experience of implementing partners in similar activities of climate sensitive interventions is crucial to the Project. In particular, PMU and DCUs will have to consider the assets and skills provided by recent or ongoing projects in Sindh and in the three targeted districts. For examples, the GCF funded project “Transforming the Indus Basin with Climate Resilient Agriculture and Water Management” (2020-2026) has supported, in the district of Badin (as well as Umer Kot and Sanghar districts in Sindh), agrometeorological service providers as well as extensionists with Climate Smart Agriculture skills. The supported farmers might also be very key to support and strengthen the other communities.

Summary of Project Stakeholder Needs

108. The following lines describe the expected needs of the stakeholders which may be refined when the project will start being implemented after meeting with them.

109. Foremost are the government departments including PMU and others to be well versed with the project objective and proposed interventions. The Agriculture and Fisheries Departments should have the knowledge and experience of climate smart agriculture, salinity management and fisheries management as affected by climate change. The introduction and adaptation of available best practices, techniques and locally suited technologies in agriculture and fisheries will be essential to achieve the goal of the project.

110. Agriculture Department is already working with FAO in climate smart agriculture (in Badin district) and should be able to ensure all the three districts have the required knowledge for such interventions, however, the Fisheries department needs, for additional skills and know-how, will have to be identified. As importantly, public services will be supported to adopt both, a system approach (so that technical advice can be provided given the constraints and potentials smallholders are facing from various perspectives), and a participatory approach (built on the practices, knowledge, objectives of smallholders). The services they will provide throughout the project should lead to the empowerment of local communities from a technical, a social and an economical point of view.

111. SCRP will be implemented through SMPs to be hired through a competitive process. One of the requirements for them would be their experience and capacity for delivering such services to the government officials as well as VOs and other interest groups. Consultants and other service providers, as required from time to time, will also have the required knowledge and experience as per needs of the project.

112. SCRP seeks to develop the resilience of poor and vulnerable smallholders. In addition to technical and economical skills, smallholders will have to be empowered through the project, encouraging self-confidence and agency. To do so, members of Village Organizations and Subgroups (see 3.2 above) will be provided with basic and sufficient economic, social, climate and environmental information related to Sindh context and trends and their links with food system and nutrition (see as an example the development for information on climate in paragraph .(below .26

113. For the same reasons, exchanges among villages, and a few visits of communities with success stories outside the three districts might be organized. Meetings among subgroups, between male, female and youth subgroups will be encouraged at village level to foster cooperation and inclusion. Bargaining capacities should also be skilled for subgroups to negotiate with their economic partners (suppliers of inputs and services, collectors, landowners). Skill provision in governance mechanisms will help to ensure smooth running of Village Organizations and interest subgroups. In addition, functional literacy might be also needed particularly for group leaders.

114. Strengthening technical and business capacities of various Villages Organisations and subgroups will be key, as part of Components 1 and 2. This involves taking existing skills into consideration, fostering peer exchanges, setting up training courses using the Farmer Field School approach and strengthening technical decision-making capacity. Depending on subgroups and their business and adaptation plan, focuses might be provided on Climate Smart Agriculture (salinity and water management practices, drought resistant varieties of crops, short duration crops, manure and compost, introduction of land levelling, practices like zero tillage, mulching, bed and furrow irrigation and sowing in lines using drills, agrometeorological information, post-harvest and food loss reduction methods), on fishery and aquaculture (marine meteorology, fisheries management, fish feed, aquaculture and reducing post-harvest losses), on livestock (animal feed, animal health), on food processing (food storage conditions, food transformation techniques, food transport), on kitchen garden production, on rural business development. Furthermore, depending on the villages' job needs assessment, technical skills will be provided by STEVTA (smartphone maintenance, solar panel installation and maintenance, vehicle and engine maintenance, for employable skills and self-employment business activities).

115. As much as possible and relevant, exchanges and links among groups, for technical solutions and partnerships will be encouraged (e.g., leading to increased manure recovery for crop production, or to mix rice production with shrimp product for example, or introducing fodder production in tidal zones).

116. In addition, those groups will be supported to strengthen their positioning and obtain more adapted services from suppliers (supply of inputs and services such as finance and agrometeorological information, extension services) as well as from markets and food collectors. Special focuses will be provided on land tenure for smallholders to understand land agreements. To do so, support organizations will be essential and must adopt a participatory approach enabling smallholders and villages groups to more empowerment.

117. Overall, the target communities need to be sensitized about climate change and its impacts. Generally, there is an understanding about the change in weather like change in rainfall pattern and intensity, occurrence of floods, droughts and cyclones but awareness about the possible climate trends, their expected long term impacts, the connections between climate vulnerability, healthy/degraded ecosystems and agricultural productions will be very key, in order, for farmers, social groups and households, to prevent and mitigated these climate impacts in adopting adaptation options and coping with disaster risks.

118. There will always be a need for financial support to the target communities and groups. SCRIP has included the process and mechanisms for introducing financial facilities to farmers and fishermen to invest and adopt the technologies to overcome the climate related losses.

STAKEHOLDER ENGAGEMENT PROGRAM

Purpose and Timing of Stakeholder Engagement Program

119. The purpose of stakeholders' engagement is to take them on board about the whole process of project development and implementation, its objectives, proposed interventions, implementation methodology and process, its benefits and risks etc. As discussed above, the stakeholders have already been identified. IFAD and the relevant departments of the government of Sindh (Planning and Development, Agriculture [extension, research, water management], Fisheries, Coastal Development) are already on board since the concept stage. Frequent consultation meetings have been held with them in Karachi and Badin by the IFAD SCRIP Design Mission in June 2023 and Design Mission in November 2023 for discussing the approach and methodology, target groups, interventions and implementation mechanism. The Concept Note was shared with Government of Sindh for its feedback while the Project Design Report will also be shared with them when ready.

120. With the start of implementation, IFAD will engage with the concerned PMU and other government departments' staff at the Secretariat and concerned Districts level in a start-up workshop to apprise them about their roles, build their capacity on the implementation strategy, selection and involvement of the target communities and groups including youth and women. To mark the occasion, a public session will be held with the strategic partners and representatives of the beneficiaries to present the project and gather comments and proposals concerning its implementation. Some key questions about implementation and the conditions for

success will guide the discussion and ensure involvement of parties. For examples the selection criteria, formation of village organization and umbrella development plan of VOs will be discussed.

121. At early implementation, umbrella plans will be designed with VOs, as part of a participatory approach. They will identify priority community and value chain infrastructure deficits that need to be addressed. Identification of interest groups around certain value chains, development of business plans, capacity building needs and required technical assistance will be explained.

122. Social Mobilization Partners to be hired as implementing partners will be deeply involved in the project at all levels. They will have a key role in implementing the project to the satisfaction of client and beneficiaries for minimizing the chances of complaints. Some RSPs are involved in IFAD's NPGP project and other projects in the target and neighbouring districts working with the communities. They have been very helpful in facilitating IFAD's Concept and Design Mission field visits to the concerned communities in all the three districts of Thatta, Sujawal and Badin. FAO is implementing a GCF project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management - TIBCRAWM" in Badin and IFAD Design had quite elaborate discussion and consultation with it during the Design Mission in November 2023.

123. After selection, PMU will hold detailed sessions with the implementing partners on the objectives, approach and methodology, target groups selection, development of umbrella village plans and infrastructure needs. Their expected role in project implementation under different components and activities will also be thoroughly discussed. Details about identification and selection of value chains, assisting the farmers and fisherfolk to achieve true production potential of their existing economic activity and get fair market return through access to improved inputs (including nutrient-rich varieties and self-produced inputs such as compost or biopesticides), production technology, climate change adaptation, affordable credit services, training, extension services, aggregation/grading and competitive markets will be explained. Engagement with the target groups, setting targets and development of work plans and implementation mechanisms will be discussed.

124. Some of the target communities have been visited with the purpose of assessing their current livelihoods situation and needs and discussing the expected SCRPs project. They included agriculture and fishing communities, existing cooperatives and businessmen.

125. However, further consultation is required concerning climate change adaptation and the measures for mitigating its impact in the agriculture and fisheries sector to be prioritized and implemented. Applying the targeted adaptation assessment methodology, the government departments, RSOs, and VOs will be consulted about possible adaptation measures also contributing to reducing exposure and sensitivity to climate hazards. A set of techniques and approaches derived from Climate Smart Agriculture, Agroecology, Marine Ecology and Aquaculture, and food processing will be assessed and prioritized for their implementation through the project toward smallholders.

126. The Project will deploy a comprehensive communication campaign at the start involving radio and televisual media, as well as electronic and print media to inform the potential beneficiaries about project approach, interventions, eligibility and roles and responsibilities. This will be further backed by PMU, Agriculture, Livestock and Fisheries Extension staff to inform the target cohort. This will be followed by IPs and Extension staff visits to target villages to organize the willing villages into partner VOs, as per the well-established process in prevailing social mobilization approach. Overall PMU district offices, agriculture extension, livestock and fisheries departments together with the implementing partners will be responsible for engagement and consultation with the VOs, interest groups about SCRPs interventions and their role in selection and implementation of schemes and activities.

127. Introductory and consultative meetings have already been held with the following stakeholders during the Design Mission to discuss the above and the selected adaptation measures.

- Planning and development department
- Agriculture department (Extension and Research, On Farm Water Management)
- Livestock and Fisheries Department

- Forest and Wildlife Department
- Irrigation and Drainage Department
- Coastal Development Authority
- Food and Agriculture Organization
- National Rural Support Program
- Sindh Rural Support Organization
- WWF

Support to VOs will start with a village wide consultative and participatory diagnostic of livelihood sources of various income groups, opportunities and constraints in raising incomes, women and youth situation and opportunities, favourable entry points, potential leaders and opinion-makers, socio-economic infrastructure endowments and deficits and then build on this information a holistic plan for formation of various interest groups and their livelihood support plans

Strategy for Information Disclosure

128. As discussed above, information was shared with the concerned stakeholders during the meeting for their information and feedback to IFAD. After SCRП approval by IFAD and Sindh government, the information including PDR, SECAP and GRM will be available to all from the PMU office, Project website and IFAD website. Similarly, anyone can request for required information from the Project office. SCRП will be presented to each target village at the start of the support phase.

Review of Comments

129. The observations and comments offered during the design was recorded and thoroughly reviewed by IFAD team and be addressed in the report as long as possible. Otherwise, sufficient justification will be provided for no or partial consideration.

RESOURCES AND RESPONSIBILITIES FOR IMPLEMENTING STAKEHOLDER ENGAGEMENT ACTIVITIES

Resources

130. SCRП will provide the required human and financial resources through PMU. Training needs assessment, planning, identification and hiring of experts or firms will be the responsibility of PMU. Some of the training courses under agroecology, CSA, salinity management, marine ecology, value chains identification and business plans preparation may be outsourced by PMU or through SMPs. Lessons learned and knowledge gained from FAO/GCF project "TIBCRAWM" will also be handy assets to be used by SCRП. The selection of RSOs and other partners will be based on prior experience in social mobilization, climate resilient infrastructure, CSA and fisheries management.

Management Functions and Responsibilities

131. As discussed before, PMU is the overall entity for the management and implementation of all activities. It will also have district level units in each of the three selected districts to manage the related activities. However, SMPs will be assisting and facilitating the implementation of adaptation measures directly or indirectly through expert consultants.

GRIEVANCE REDRESS MECHANISM

Objectives of the Project GRMs

132. The objective of the project GRM is to provide project stakeholders with accessible and inclusive means to raise issues, concerns and grievances and allow the project leadership structures to respond and act upon them in a timely, effective and transparent manner that promotes a good direct and indirect stakeholder relationship and a harmonious atmosphere.

133. The GRM will be a system by which queries or clarifications about the programme will be responded to, problems with implementation will be resolved, and complaints and grievances will be addressed efficiently and effectively. The purpose of the grievance redress mechanism is:

134. To be responsive to the needs of beneficiaries and to address and resolve their grievances;

135. To serve as a conduit for soliciting inquiries, inviting suggestions, and increasing community participation;

136. To collect information that can be used to improve operational performance;

137. To enhance the programme's legitimacy among stakeholders;

138. To promote transparency and accountability;

139. To deter fraud and corruption and mitigate programme risks.

Principles of the Project GRMs

140. The GRM is based on the following six guiding principles:

1. Responsiveness and Confidentiality

141. The GRM will entertain all types of complaints, comments and suggestions, with a view to protect beneficiaries from any risks related to the project implementation and improve the project's efficacy and efficiency. Comments and suggestions received will be given due consideration and the providers will be kept informed of the response to their inputs. In order to ensure transparency in handling and processing of grievances, all project stakeholders, especially complainants will be kept informed of the handling process and the outcome of the redress process in timely manner. As confidentiality is an integral part of fairness, the identity and personal details of complainants will only be disclosed to those involved in the resolution of the grievance.

6. Objectivity and Independence

142. The mechanism empowers the Grievance Redress Cell to operate independently and objectively while handling grievances and to ensure that 1.all information, stakeholders and records required for inquiry and analysis are easily accessible. To avoid any conflicts of interest the selection of Complaint Handling Officers will be made from the project / consultant staff / community members, identified at different tiers of the project structure and community groups.

7. Simplicity

143. Simple procedures will be adopted for logging complaint and/or submitting suggestions or comments (described below), to ensure the GRM is accessible and understandable to all project stakeholders especially marginal groups, poor farmers and female beneficiaries.

8. Fairness

144. The GRM will equally consider all complaints irrespective of their nature, size and complexity. All complaints, comments and suggestions received will be registered and the person or entity making the request for Redress will be acknowledged in writing. The project staff implementing the GRM will be specially trained for grievance handling and resolution.

9. Timeliness

145. All grievances, irrespective of their nature and size shall be considered and corrective actions taken within 25 working days. All possible efforts will be made to complete the process within the shortest possible time.

10. Participation

146. The GRM encourages any stakeholders to lodge complaints, make suggestions, including for improvement of the GRM. The GRM will ensure that project beneficiaries are included in the process of redressing grievances and incorporating suggestions where required. Matters concerning Environmental and Social Management and Involuntary Resettlement will be an integral part of the process.

Eligibility and Validity of a Complaint

147. A complaint is considered valid and will be processed by the GRM whenever:

- It relates to an on-going SCRP financed activity;
- It is filed by project affected individuals and/or communities, or their representative, who believe that they are or may be directly and adversely affected by the project.
- The complainant is not a direct affected beneficiary of the project, but the subject of the complaint affects him/her or their community;
- Complaints with inadequate details will not be rejected for lack of information; the project will seek additional information from the Complainant/s and then take a decision on eligibility.

Exclusions

148. The following types of complaints shall not be taken up for consideration:

- Anonymous complaints;
- Frivolous issues that are not related to the Project;
- Cases involving decisions/policy matters in which the complainant has not been affected directly/indirectly;
- Cases where quasi-judicial procedures are prescribed for deciding matters or cases that are sub judice;
- A grievance which has already been disposed of by the GRM unless new evidence is submitted; and
- Complaints about corruption which should be lodged and dealt with separately from this system.

Grievance Redress Process

149. The process will involve the following procedure and mechanism.

Grievance Registration Procedure

150. A GRM should be located as close to the people as possible to be accessible to the affected persons (APs) including vulnerable groups. Project stakeholders and APs will be able to use a variety of channels to access GRM. It is important to identify and make provisions for different means of entry into the grievance redress process, as it helps to increase the access of APs to the GRM. Multiple channels can be used for presenting complaints. A grievance or a complaint can be registered in four ways; (1) Direct hard copy to the concerned office, (2) project website, (3) sending SMS or WhatsApp messages and (4) email. All the four facilities will be available after project offices are established, staff recruited and designated and communication channels are established. SMPs offices in the concerned districts will also receive complaints directly from the communities or through above mentioned ways. The Project will develop a standardized Form for complaints/comments to be available in the offices and on website. The required addresses, cell numbers and emails will be publicised in the project area and displayed

in the concerned offices. The GRM procedure, focal persons for receiving and responding to the grievance, timelines for redressal and guarantee of confidentiality will also be shared.

151. The receipt of complaints is key and hence a simple and understandable procedure is adopted for receiving grievances, suggestions and comments relating to the project. The complainant may submit, containing his/her personal information, suggestions and/or comments on a simple paper, to the (i) PMU office in Karachi, (ii) DCU/SMP office in Thatta, (iii) DCU/SMP office in Sujawal, (iv) DCU/SMP office in Badin. Usually, the concerned office should have a Focal Person for receiving and registering a complaint/suggestion/comment or the Aggrieved Person/Complainant can drop his/her written complaint, suggestion/comments in a Box placed at a visible location for the purpose in the office. Complainants will be encouraged to use the standard format that will be available at every office/outlet mentioned above.

152. The Project will ensure that any person either in his personal capacity or representing a group of complainants and/or entities that files a grievance will be made aware of the grievance mechanism. The Project will facilitate tracking, evaluation and response to grievances.

153. A project GRM awareness campaign will be launched in print and electronic media. This will include distribution of brochures (in local languages), signboards in the vicinities where project interventions will be executed and in print media. The contents of these hoardings may include but not limited to the following:

154. All grievances, suggestions/comments etc. will be recorded in a Grievance Register by the Focal Person(s) / Complaint Handling Officer within two (2) working days of the receiving of the grievances. A unique number will be assigned to each grievance, suggestions and comment. In addition to lodging a grievance/suggestion/comment in the Grievance Register, the same shall also be uploaded in a dedicated database to be maintained at Project Web Portal, which can only be accessed by Project Director or any of his assigned representatives.

155. The Focal Person will formally acknowledge the receipt of grievance within five working days of the submission of grievance and will inform the complainant that the Project will respond within 20 working days. It will be ensured that all such acknowledgements, verbal or written are recorded in an appropriate manner to ensure a record of correspondence. Acknowledgments should include a summary of the grievance and an estimated time for response/resolution.

Grievance Redress Mechanism

156. The mechanism involves a hierarchical order starting from the field or district level Grievance Redress Sub-committee (GR Sub-committee) to the PMU level Grievance Redress Committee (GRC) to the Steering Committee (PSC) as shown in Figure 2. Usually, complaints and grievances should be resolved to the satisfaction of the complainant/aggrieved person at the concerned DCU Sub-committee level otherwise, it will be referred to the GRC which should decide and resolve the issue. The complainant can appeal to the Steering Committee through GRC if he/she is not satisfied with the decision of GRC.

Roles and Responsibilities of Grievance Redress Committees

Project Steering Committee

157. The Project Steering Committee (PSC) will act as the Apex Forum to hear and adjudicate on appeals against GRM decisions. Pending cases shall be presented by the Chairperson of GRC to the Project's Steering Committee. The PSC will review and resolve any appeals against the Grievance Redress Committee. Appeals must be lodged with the GRC for submission and reporting to the PSC.

Grievance Redress Committee

158. The Grievance Redress Committee (GRC), constituted at PMU Level and chaired by Project Director, will have the following mandate:

- Resolving and addressing complaints not resolved at GR Sub-Committee
- Reviewing appeals lodged against the resolutions of GR Sub-Committees

Considering and determining corrective measures in the light of comments and suggestions received by GRC and/or recommended by GR Sub-Committees
Monitoring GRM handling by GR Sub-Committees and reviewing resolutions suggested to them.
Notifying members of GR Sub-Committees
Analyzing data on grievances and using this to make informed decisions
Reporting to PSC unresolved grievances at GSC level

159. The GRC will be the highest forum within the project for redressing the grievances received from the beneficiaries, stakeholders and other concerned. The committee, while handling a complaint may requisition any staff for its assistance and/or may constitute a special committee if required.

Grievance Redress Sub-Committees (DCU level)

160. The GR Sub-committees will be established at the three DCUs (Thatta, Sujawal and Badin). These Sub-Committees will be responsible for redressing complaints, grievances and suggestions in their respective areas and will forward unresolved complaints and unattended suggestions / comments to the GRC. A Focal Person in each CDU office will be responsible for collecting, registering and handling complaints, suggestions and comments that are submitted.

Verification of Complaint/Investigation/Redress

161. Once a complaint and/or suggestion / comment has been forwarded to the GRC or Sub-Committees, the Chairperson of the Committee will nominate a committee member to verify the issue and/or analyze the suggestion / comment prior to a thorough investigation, and to prepare a working paper for consideration of the Committee / Sub-Committee in its meeting. The investigations will include collecting and reviewing relevant documents, making site visits, consulting appropriate internal staff, contacting external stakeholders, interviewing the complainant as appropriate.

162. The Committee and Sub-Committee will meet as often as required to handle complaints and suggestions. The GRC and its Sub-Committee will ensure attendance of complainants at meetings as observers to ensure transparency. The GR Sub-Committees, in case of complaints pertaining to social and tribal issues / conflict, may redirect complaints for redress through the local elders if required, or they may invite such elders to their meetings for facilitation and assistance.

Right of Appeal

163. If a complainant is dissatisfied with and/or unwilling to accept the resolution of the GRC or its Sub-Committees, he/she may approach the appellate forum for review. The appeal committees will review the case and determine if further action is possible. Once all options for corrective actions have been explored and no further action is deemed appropriate, a written notice will be sent to the complainant advising that his/her grievance case is closed. In cases where appellate forum is PSC the complainant will be asked in writing to submit a written appeal along with the reasons for not accepting the resolution of GRC, for submission to PSC for issuing a final decision into the matter.

Figure 1. GRM redress mechanism.

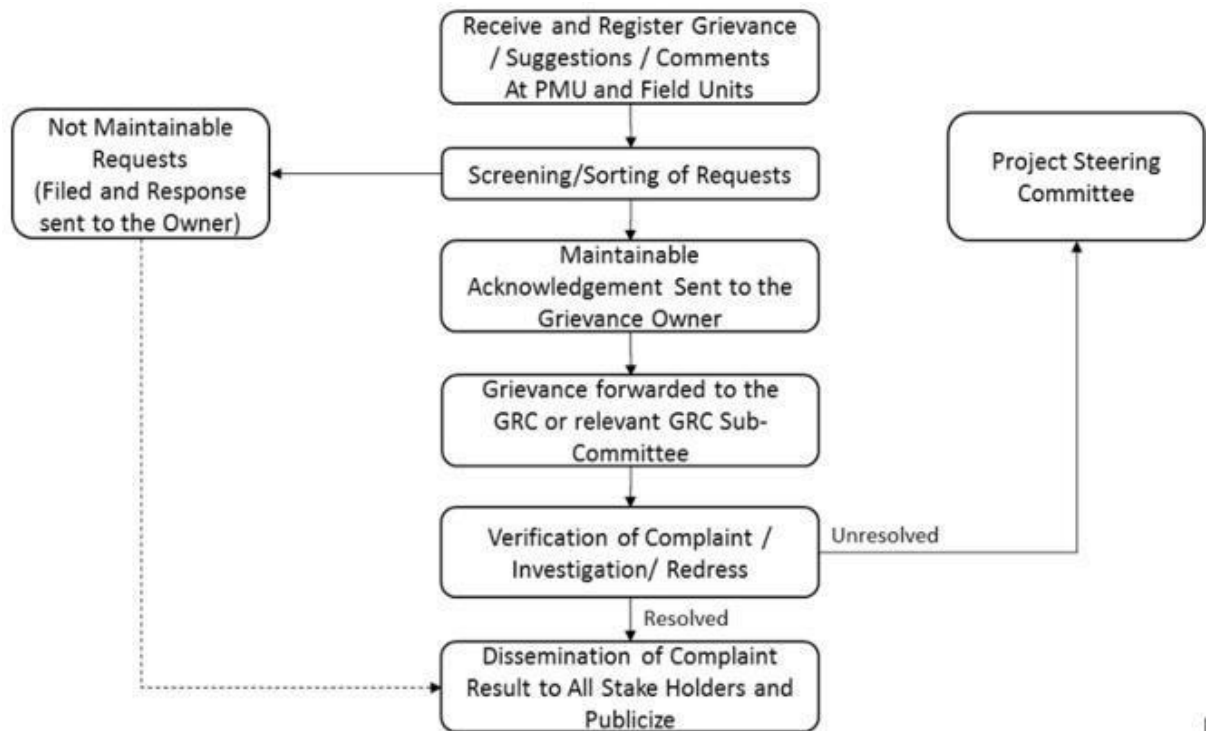


Figure 2. GRM process from complaint registration to final resolution of complaint.

MONITORING AND REPORTING

Involvement of Stakeholders in Monitoring Activities

164. As discussed above, the stakeholders will be involved throughout the process from verification of the complaint/grievance to the resolution and conclusion of it. In case they are not satisfied, the right of appeal has been provided at GR Sub-Committee and GR levels. Also, community elders may be involved during the proceedings for transparency purposes.

Reporting Back to Stakeholders and Feedback

165. Once the redress process is completed and the GRC and/or GR Sub-Committee has reached a conclusion, the result will be communicated to the complainant and concerned stakeholders. The results of the redress process will be uploaded to the project website. Besides communicating the results to the Complainant, the Focal Person(s) / Complaint Handling Officer will also record the information pertaining to the decisions of the Committee(s) in the grievance register and corresponding grievance database. The actions suggested by the GRC or Sub-Committee will be communicated to the concerned person(s) and will be recorded in a register.

166. The complainants will be informed of the proposed resolution in writing, and if need be, the same can be explained over telephone or in person to his/her satisfaction. If the complainant is not satisfied with the resolution, he or she will be informed of further options, which would include pursuing remedies through avenues afforded by the Pakistan's legal system.

167. The written response will clearly outline the course of action the project has undertaken to redress the grievances and the specific terminal date by which the recommended remedies shall be completed. Potential actions will include responding to a query or comment, providing users with a status update, referring the grievance to another level of the system for further action. The project will take action on every grievance. The Affected Person shall provide a written response agreeing or disagreeing with the proposed course of action within two weeks period after receiving the recommended actions.

Regular Review of GRM Process

168. GRC will conduct quarterly and annual review of the GRM process to ensure that all registered complaints and grievances have been resolved and actions taken. It will also check for compliance with the process, any gaps and improve the process. The following Table shows the objectives and monitoring indicators of the quarterly and annual reviews.

Period	Objectives	Indicators
<p>Quarterly review of quantitative indicators</p>	<p>To assess if grievances are correctly screened and classified</p> <p>To assess if suggestions / comments are properly identified and classified</p> <p>Identify trends in Grievances</p> <ul style="list-style-type: none"> · To ensure grievances are being addressed 	<p>§ Number and type of grievances received</p> <p>§ Number of grievances redressed by GRC and the three Sub-Committees.</p> <p>§ Repeat of grievances from same stakeholders</p> <p>§ Repeat of grievances from several stakeholders</p> <p>§ Timeframe for closure of grievances</p> <p>§ Number of comments accepted and corresponding actions taken</p> <p>§ Number of suggestions received and accepted</p>
<p>Annual review of grievance redress process</p>	<p>To assess the compliance with the GRM</p> <p>To evaluate progress with achieving results</p> <ul style="list-style-type: none"> · To identify improvements and update grievance handling and redressing procedures 	<p>§ Compliance with the GR process</p> <p>§ Completeness of grievance log and register</p> <p>§ Number of grievances received by type</p> <p>§ Number of grievances resolved</p> <p>§ Number of appeals received</p> <p>§ Number of appeals resolved</p> <p>§ Qualitative assessment of stakeholder awareness of grievances mechanism.</p> <p>§ Number of suggestions/ comments accepted</p>

4.

BUDGET

A sufficient budget should be dedicated to the GRM as part of the Project implementation cost.

- vi. Annexure-22: Targeted Adaptation Assessment **provide suggestions and guidance.**
- vii. Circulation of guidelines, templates for FOs registration.
- viii. Guidelines for fund disbursement mechanism and legal requirements
- ix. Implementation guidelines/M&E/Audit including ownership/ responsibilities of each partner would be explicitly shared during the session.

151. The awareness session would be conducted as an interactive session with practical scenarios for better understanding for promoters as well as for FOs leaders. Promoters need to be given 4 (four) weeks to prepare and submit finalized Business Plans and, in meantime, respective IPs, who are assigned for specific partnerships by the project, would assist promoters to develop the BPs according to the standard which is prescribed by IFAD/ SCRIP as mentioned below:

- i. Focus should be to increase farmers income by at least USD 200 per acre per year by “on farm” productivity enhancement, engagement of FOs in primary processing and value addition and reduction in post-harvest losses. Infrastructure development for collection, post-harvest handling, process modernization and value addition at factory level is considered under company contribution under 4P model. However, project will consider such developments under matching grant facility for regional SMEs.
- ii. Approximately average of 150 USD per beneficiary could be allocated through the investment plan. Based on the value addition capacity this allocation can be varied. Rest will be from farmer/FOs and promoter contribution accordingly. Nevertheless, special consideration would be given for the innovative projects which have the potential to be implemented at large scale.
- iii. The matching grant by IFAD would not exceed 50% of investment in a 4P—the remaining 50% shall be provided by the private sector. The average investment per 4P is estimated at US \$200,000 per 4P, inclusive of private sector investment.
- iv. The matching grant would be provided as a complimentary to own contribution of the farmers & private sector investment and IFAD funds will be strictly for activities related to targeted farmers.
- v. Proposal shouldn’t harm ecosystems, and encourage and incorporate climate resilience approaches, nutrition sensitive interventions, GAP, GMP with special focus to gender and youth accordingly.

152. In the event that a promoter is not competent to develop the proposal, PMU would provide technical assistance in BP development through the IP specialists.

(3) Step 3 – Evaluation of detailed proposals against criteria

153. Once the proposal is developed and submitted to PMU via IP or directly—as the case maybe, the initial evaluation and appraisal would be conducted following a feasibility study by the in-house team (BPET) which will be part of the PMU. The BPET team can be comprise of:

- i. Value chain/business development expert/specialist
- ii. Finance expert/specialist
- iii. Gender, youth and nutrition, environment and climate expert/specialist

154. However, the composition of the team will vary depending on the project profile. The team would be led by value chain/business development expert/specialist, and the final report would be a compilation of individual assessments by above mentioned team and should be submitted to Programme management within 14 (fourteen) days after submission of proposal.

155. Depending on the feasibility assessment, program management would decide to go ahead with the proposed partnership, however, if it does not meet the required ratings, PMU would communicate to the promoter/IP highlighting the concerned areas accordingly. Further, PMU would allow the promoter to rectify the concerned areas and resubmit the proposal within 21 (Twenty-one) days.

156. Once the approval is obtained for the Initial Appraisal Report (IAR), the value chain/business development expert/specialist is responsible to produce a final appraisal report to PMU management within 10 (ten) days from the approval date. The appraisal report should comprise of:

- a. Promoter company due-diligence: Background and experience in the industry, reputation, profitability, infrastructure availability to support the proposed intervention and previous experience of working with rural farmer/smallholder communities/donor funded agencies.
- b. Farmer beneficiary analysis: Geographical locations of beneficiaries, classification according to their income level, production (productivity and quality), climate vulnerability and environmental performance, gender, age, age, existing income activities, volumes generated, institutional structure, performance against previous project activities.
- c. Product analysis: General description of the product/products (Outputs) through proposed intervention, cost of production breakdown, environmental sustainability and climate resilience, availability of raw materials, future trends towards the output/product etc.
- d. Financial Inclusion Analysis: Analysis with regard to equity and credit inclusion would be carried out. Proposal should include how the company and the farmers anticipate to use affordable financial products and services (grants & credit) to meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way.
- e. Risk analysis: Risk factors involve in the proposed intervention according to probability of occurrence and the severity (Impact).
- f. Investment plan analysis: Financial plans will be appraised on case-by-case basis. BPs will be appraised against Programme objectives and using an economic and multi-criteria analysis such as;
 - i. Overall profitability of the company, FO and farmers under with and without project scenarios.
 - ii. Overall evaluation on proposed equipment, machinery, other infrastructure facilities, their requirement and comparison of proposed cost based on the market rates.
 - iii. Poverty reduction potential: proportion of poor (small) farmers participating: incremental net margin, incremental benefit/cost ratio by producer, rate of return at farm level if applicable, return per labor, return per acre, incremental household income.
 - iv. Environmental performance and climate resilience of the BP
- g. Comments of appraiser: Overall summary of the report highlighting the pluses and minuses of the proposed intervention.

(4) Step 4 - Seek IFAD's No Objection for selection

157. Once the internal evaluation is completed, PMU would forward the proposal together with endorsed specifications for necessary capital assets to IFAD for NO objection.

158. Duly completed final appraisal report including comments of BPEC & PMU would need to be forwarded to IFAD for NO objection. Once the BPEC recommendation, evaluation and approval given, PMU will send the proposal for IFAD No Objection Clearance (NOC), the preparation of the necessary legal documents should start as soon IFAD's NO objection is obtained.

159. IFAD would provide No Objection after review based on the information and holds the right to seek clarification and even alternation of the developed proposal. In such event, PMU would need to communicate with promoter and alter the proposal accordingly.

160. However, based on the Financing Agreement, Letter to Borrower (LOB) and general conditions, PMU shall ascertain whether or not the proposed expenses are ineligible for financing.

(5) Step 5 – Inception of Implementation

161. Once the IFAD's approval is given implementation work will be initiated, including orientation, targeting strategy, organization and strengthening of farmers including farmer mobilization and formation of FOs, registration, opening of bank accounts, etc. Since the equipment, machineries and infrastructure facilities to be given and implemented is finalized, and approved, purchasing process can be initiated following the standard operating procedures (SoPs) approved by project.

(6) Step 6 – Contract/Agreement

162. Following IFAD's approval, finalization of the legal documents should be done within a weeks' time and signing of agreements between the stakeholders need to be arranged. Agreements are supposed to add legal framework to partnerships where stakeholder are obligated for their roles and responsibilities. Agreement defines the budget and financing arrangements: SCRP matching grant, private company co-financing, FO contribution etc.

163. PMU could seek the assistance of an external legal consultancy firm for the development of the legal agreement which needs to be reviewed for the final consent.

164. Agreements could be mostly tripartite agreement between private Agribusiness companies/SMEs, SCRP and the selected PFOs especially for the 4P model. However, there could be exceptions for different models such as hybrid model, where more than 3 (three) parties are involved under equity sharing concept.

e) Partnership Implementation

165. Within 14 days of agreement signing, PMU/DCUs should conduct an orientation session for representatives of private Agribusiness company/SME, FOs & related Government Institutions (Extension etc.) who are directly involved in partnership implementation including the IPs, followed by several beneficiary mobilizations sessions depending on the number of beneficiaries under the partnership on terms and conditions of the Agreement for smooth implementation of the partnership.

166. The farmer list cleared by FO with the support of IPs should be submitted to PMU/DCUs for registration. After obtaining the PMU approval, the related IP would register the farmers in its MIS and the lists will be shared with field officers for detailed data collection and registration.

167. If promoter engage directly with beneficiaries, all the beneficiaries/or if the promoter works directly with FOs, both respective eligible entities and individual farmers should open a bank account in selected bank where all the transaction would be carried out through the account including fund transfer.

f) Audit & Inspection

168. Based on the arrangement 4P, if private sector is managing the fund the accounts should be audited by the reputable chartered accounting firm acceptable to the Fund or in case of FOs, the audited report of cooperative department would be required. Grievance redress mechanism reports will be considered during audit and inspection (**GRM is developed in the Stakeholder Engagement Plan in Annexure-21: Stakeholders Engagement Plan (SEP) & Grievance Redress Mechanism (GRM)**). Farmers will be also directly interviewed by auditors.

2. Sub-Component 1.2 Community and Value Chain Support Infrastructure

169. **Scheme Identification and Budget per VO:** The VO Umbrella Village Plan will provide the basis to identify and prioritize georeferenced community infrastructure investments while value chain/interest groups plans will be the basis for identification of value chain related infrastructure and equipment investments. Womens priorities in community infrastructure will be separately identified and given additional weightage. Each VO will be eligible, on average, for a grant up to US\$ 50,000, to address (a) priority community/social infrastructure needs to reduce climate vulnerability (drinking water, sanitation, irrigation, all weather road links, household solar systems etc.); (b) value chain support infrastructure needs (equipment and infrastructure for post-harvest management, product processing, aggregation, value addition and climate adaptation). Community infrastructure investments will be for schemes benefitting entire/large majority of village households while value chain infrastructure investments will be focused on interest groups. A VO may undertake one or more infrastructure and value chain schemes within the available budget ceiling. A minimum of 30 percent funds will be allocated for Interest Groups processing and value addition infrastructure investments. Investments in an individual Union Council under this sub-component should not exceed the average allocation of US\$ 470,000 per Union Council. As a rule of thumb, land required for any investment will be provided by the beneficiary VO/Interest Group and no project funds will be used for that purpose. Also, satisfactory community-based O&M arrangements must be defined and agreed upfront with the beneficiary communities prior to initiation of work. In case of roads and landing sites infrastructure, P&D will issue appropriate policy for O&M arrangements. Unit costs for individual schemes are provided in the Costab of SCRP.

170. **Scheme Specific Criteria:** Each type of prioritized scheme will have to meet some general criteria to ensure cost-effectiveness and equity of benefits to large number of households and interest group members and to guard against elite capture. For various types of schemes, the criteria are:

- a. *Rural Roads and Fish Landing Site Link Roads:* (i) Right of way should be available or made available by the community as per rural roads specification; (ii) road should connect to majority of farmland produce or households to nearest trunk road infrastructure; (iii) adequate cross drainage and foundation height shall be ensured to protect road from extreme weather events; (iv) metalled portion will be minimum of 12 feet width and 3 feet compacted shoulder on each side; (v) roads for fish landing sites will be prioritised on the basis of daily catch landing; (vi) P&D will notify a O&M policy for all project funded roads prior to start of construction activity. This equipment will be designed to be climate-proof.
- b. *Solar powered RO Plants:* (i) Will be provided to villages with minimum 100 households; (ii) village must have no alternate means of clean drinking water available and have brackish underground water; (iii) Upfront agreement with VO for plant operation and maintenance arrangements, including positioning of one trained and paid person for plant operation¹², monthly user fee collection and account keeping system; (iv) Land for plant building will be provided by the community at IP specified location; (v) adequate arrangements for plant safety against vandalism and improper use.
- c. *On-Farm Irrigation Improvements:* (i) Must benefit majority of VO members; (ii) must have been identified in VO plan as a contributory factor for poor production; This equipment/infrastructure contributes to the climate resilience of farmers. They are designed with the support of Sindh Irrigation Department and comply with integrated water resources management principle.

¹² The standard agreement and guidelines are available in GLLSP-II and SPPAP which can be adopted.

- d. *Storage Ponds*: (i) To be constructed in villages that face seasonal/periodic canal water shortages; (ii) Land for ponds to be provided by the community; (iii) Upfront establishment of user rights and pond maintenance arrangements; (iv) maximum use of local materials and an underlay of impermeable membrane to prevent leakage; (v) cost may include provision of water extraction apparatus (solar or fuel pump); (vi) community rights may include pond leasing rights for fish rearing to generate revenues for VO/Interest Group; (vii) good practices and appropriate equipment will be provided to avoid risk such a drowning for children. They are designed with the support of Sindh Irrigation Department and the Livestock and Fishery department of Sindh and comply with integrated water resources management principle. Owner communities of the ponds will have to respect clear specifications to prevent damage to ecosystems.
- e. *On-Farm Drainage*: (i) VOs with pronounced issue of water-logging or periodic flooding affecting their production and productivity will be eligible; (ii) To the possible extent, the investment will be aligned with and connected to larger drainage investments under ADB financing or an existing trunk drainage infrastructure; (iii) land for drainage infrastructure will be provided by the community; (iv) Investment should benefit substantial number of VO members and land and schemes feasibility should clearly establish that cost-benefit analysis. This investment supports the climate resilience of communities.
- f. *Household Latrines*¹³: The objectives of this intervention are to: (i) minimise open defecation practices in the target districts and communities, (ii) provide safe and accessible sanitation facilities for women and girls, (iii) reduce diarrhoeal diseases, which negatively impact nutrition intervention and, (iv) at the same time, demonstrate cost effective models of latrines that people can adopt for replication with their own means. (v) Only BISP beneficiary households will be eligible for this intervention and only one latrine per household. (vi) Must have no similar intervention from any other previous or on-going programme; (vii) Must have access to water; (iv) must attend/undergo project supported WASH trainings for the community. Where possible, ecological sanitation (Ecosan toilets^(O&I)) will be tested and implemented: Ecosan toilets turn what is usually regarded as waste into a safe affordable compost and fertiliser, returning valuable nutrients and carbon to the soil, and helping to increase crop yields and increase climate resilience with better soils. EcoSan can be used for example to improve productivity in kitchen garden.
- g. *Household Solar Power*: The intervention is aimed to be implemented in the villages with no grid connectivity. Primary target group are households in Poverty band of 0-32 on NSER. Each household will be provided a self-contained unit, with basic management training for its safe use and maintenance, with sufficient energy storage capacity to provide uninterrupted supply for entire duration of night for two fans, two LED lights and phone charging. Cost of solar compatible fans, lights and wiring will be part of the package. No household contribution in the cost will be involved. PMU may enter a framework contract with a reputable supplier of quality products to supply and install equipment and provide after sale services to target villages and households including basic training.
- h. *Aggregation/Grading Platforms*: Objective of the intervention is to enable the VO/Interest Groups to have a clean and covered space for aggregation, weighing, bagging, packaging, processing and grading of their produce prior to transportation to market. It would consist of a cemented raised platform with overhead shed. The size/covered area will depend on volume and type of produce that would need to be aggregated and processed. It will also serve as temporary storage place prior to sale. (i) Identification of investment must clearly demonstrate this as a constraint or need affecting produce price and marketing; (ii) Must benefit majority of

¹³ Latrine specifications and costs can be replicated from IFAD-funded SPPAP.

VO/Interest Group members; (iii) Land is to be provided by the community adjacent to a road and convenient for access for most members; (iv) maintenance and right of use arrangements must be upfront agreed with the beneficiaries; (v) in case of produce requiring washing prior to packaging, availability of clean water must be ensured as part of scheme. This equipment will be designed to be climate-proof.

- i. *Crops Processing & Packaging Equipment*: The intervention is specifically aimed at building interest groups capacity to process and package their produce to reduce wastage and fetch better prices in the markets. It would include any equipment and small machinery that reduces labour and increases the value of produce. (i) Need must stem from VO/Interest Groups business plan; (ii) The land/space for equipment installation to be provided by beneficiaries – it may be combined with the aggregation/grading platforms; (iii) Equipment O&M arrangements must be defined upfront to ensure sustainable operation; a user fee collection, management and usage protocol may be developed and agreed; (iv) Training for Interest Group elected operator (s) must be arranged with supplier; (v) sources of spares and repairs etc. must be identified upfront.
- j. *Fish Catch Equipment, Processing and Packaging/Marketing Support*: The intervention is aimed at assisting the fisherfolk interest groups to minimise post-harvest losses, to manage fish-resource sustainably, to develop climate resilience strategies. It may include transit cooling facilities and equipment, landing site short-term refrigeration, cool boxes, efficient stoves for fish smoking, sorting/grading/cleaning platforms with water facility, fry production in aquaculture, etc. Like other investments, O&M arrangements, user fees etc. will be agreed upfront with the interest groups. Inland Fisheries and Marine Fisheries Departments will be the focal agencies for technical support during implementation and subsequent regular monitoring, supervision and technical advice to the interest groups. Rest of the criteria include: (i) provision of any required land by community and in case of Buffer Zone, by relevant government agency; (ii) facility must benefit all members of the interest group; (iii) need for such a facility must come out of the interest group's business plan and should clearly demonstrate added value and incomes.
- k. *Crab/Fish/Shrimp Rearing Ponds*: The activity is specifically aimed at youth from the fishing communities experiencing difficulty to access to lake or marine resources due to climate change. Cost includes land lease costs. Each pond will on average cover one acre area, will be simple dug-in-mud pond lined with impermeable sheets. Excavator for digging will be provided by Marine Fisheries Department from own machinery pool while project will pay the fuel and operator costs under the scheme that will be costed as part of scheme cost. Aquaculture facilities will be designed to withstand extreme weather and disasters, with features that minimize mass escapes of cultured fish during flooding, such as nets or higher dykes, and construction with robust materials able to withstand wave damage. Each interest group will have 5 to 10 members, each having one pond. They will either rear their own species or for private sector processors on upfront agreed purchase price. In case of own rearing, the scheme cost will include feed cost for one cycle. Financial instruments under subcomponent 1.3 could be availed to support additional cycles. Training courses will be provided through internship in existing aquaculture sites in Sindh. Regular technical assistance will be provided during year 1 plus one visit every quarter in year 2. Brackish-water aquaculture systems on flooded and/or salinized land and water bodies for coastal agro-communities whose land has been lost will be promoted. This can include cultivation of aquatic plants for consumption and for production of useful products, such as biofuel, plant protein and alcohols. In the longer term, such systems can rehabilitate the soil.
- l. *Fish Landing Sites Infrastructure*: There are large number of fixed and floating jetties in project area. Most of them suffer from infrastructure gaps that ultimately affect their handling capacity, hygiene assurance for the catch, and ease of loading for transportation. The Project will carry

out a rapid survey of all landing sites in collaboration with Marine Fisheries Department to identify the existing gaps and prioritise sites on the basis of total average catch landing per annum, number of fishermen and/or boats serviced and its location vis-à-vis main fish markets. Design and implementation will be through design companies and contractors hired by PMU/RCU with technical supervision by Marine Fisheries Department and Fishermen Cooperative/Interest Group. Future O&M arrangements including user fees will be upfront agreed and notified. This equipment will be designed to be climate-proof.

171. **Community Contribution:** All community infrastructure will require ten percent community contribution except for landing sites and individual goods like household latrines and fish/crab rearing ponds. The contribution can be in the form of land, local materials and labour. All BISP beneficiary households in the village will be exempt from any community contribution. All wage labour opportunities will be offered to poorest households in the village.

172. **Implementation Arrangements:** IPs will provide the required technical support for the design and competitive procurement of materials and services for most community and value chain infrastructure. While most community-based infrastructure consists of simple structures that will be designed and executed by IPs staff using community procurement processes and active involvement of beneficiary groups in scheme execution. External design and contracting will be resorted to in case of more complex investments like roads and landing sites infrastructure. The allocation per VO is a budget within which a VO may undertake one or more schemes, as long as they are justified as per their development plans, equitable benefit for the community, economical per beneficiary cost and backed by feasible community operated O&M arrangements. Apart from VO members, an additional 20,000 households are estimated to benefit from these infrastructure investments.

3. Sub-Component 1.3 Access to Inclusive Finance

173. The component objectives are to end beneficiaries' reliance on exploitative sources of informal credit, improve access to formal bank financing, establish their credit history, reduce their cost of production, utilize the advised levels and types of inputs to increase productivity, de-collateralize their produce from the traders/middlemen/dealers, allowing the beneficiaries to enter into higher priced sale contracts. It will open up avenues for additional services like crop insurance and digital banking services. As this upstream intervention progresses and the Project beneficiaries gain trust and confidence in the continuity of the availability of formal financial services, they will have an incentive to invest in value addition activities to further increase their incomes and bargaining power in their existing value chains.

174. The Project will assist beneficiaries to access formal credit services for their production/income generation activities under two streams. Stream 1 – US\$ 15 million will be invested by the project to support provision of interest free land subsidized loans to project beneficiaries, depending on size of loan. Stream 2 – US\$ 3.0 million will be a partial credit loss guarantee instrument to cover the credit risk of beneficiary loans offered by the partner banks. The credit loss guarantee will be provided to lending financial institutions as collateral for the credit to be offered to the Project beneficiaries. The partial credit guarantee will be on a reducing basis over the Project period.

175. SCRP's credit component is structured to benefit all segments of target beneficiaries. Credit services will be delivered by several participating microfinance banks/institutions and commercial banks selected through competitive process. PMU will ensure that the selected banks will be compliant with section/guideline 8 of SECAP. Main features of subsidized credit facility include: (i) low cost / subsidized credit upto a maximum of two loan cycles with a maximum loan amount of USD 1,808 (PKR 500,000) per loan per beneficiary and an average loan amount of USD 1,579 per loan per beneficiary in local currency ii) the beneficiaries will be charged 10% p.a. for the first loan and 20% p.a. for the second loan after which they will access credit at the prevalent market rates from banks iii) the subsidized

credit will be partially secured by a credit loss guarantee instrument iv) the partial credit loss guarantee will be on pari passu and declining basis with 75% for Year 1 and 2, 50% for Year 3, 35% for Year 4, 25% for Year 5 and Nil for Year 6 v) the purpose of the financing will be to allow smallholder farmers to purchase crop and livestock inputs and fisherfolk to purchase boats and the related equipment vi) the initially proposed priority value chains targeted will be tomato, paddy, wheat, chilies, purchase of small livestock for rearing and fattening, fisheries for small boats and coastal aquaculture vii) the tenor of the loans offered to the beneficiaries will be 6 months and 1 year viii) the partner financial institutions will utilize their balance sheet funding to lend to the Project beneficiaries ix) the amount of credit expected to be disbursed during the Project life is USD 121.8 Mln leveraging private sector capital upto 6.2x . Details are provided in the credit manual as part of PIM.

176. Target segments for this sub-component will be smallholder farmers, tenants, sharecroppers, fisherfolk working on others' boats and young men and women supported by project in self-enterprises who wish to further scale them up. Main production activities and value chains to be financed include: vegetables (tomato, chilies, others), melons, paddy, wheat, fishing gear, off-shore aquaculture, small ruminants, dairy, and poultry.

177. Apart from credit, the partner banks will offer additional financial services including insurance, savings, remittances and payments. It is expected that during the 7-year project life, partner financial institutions will extend 100,000 loans to 55,000 Project beneficiaries. The Project will incur a cost of USD 195.62 per loan under the structure. The lasting benefit will be that the beneficiaries will build their credit history with the lending institutions, integrating into the formal financial system. The Project will require the lending financial institutions to cross-sell insurance products, including climate risk insurance, savings, remittances and payments to the borrowers. The technical guiding principles and modalities are elaborated in Annex 23.

178. Sub-Components 1.1 and 1.2 will be implemented with Institutional Support of Implementing Partners and government extension services: This will consist of two elements – technical services provision for value chain planning and delivery, community and value chain support infrastructure delivery and credit provision facilitation and extension support from public sector entities identified in the village plans.

- (a) **Implementation Partners:** Project will engage service of one or more professional implementation partners for organizing VOs and Interest Groups, targeting eligible beneficiaries, developing their development plans with value chain development lens, and implementation of project activities through participatory processes including community led procurements, community trainings and monitoring and reporting on project progress. IPs will be engaged by PMU through a competitive process. The candidate entities will have to demonstrate (i) In-house capacity and experience in community driven participatory development; (ii) capacity for community based development planning, in particular in agriculture value chain development that integrates nutrition considerations; (iii) capacity for the design and implementation of simple community infrastructure schemes through participatory processes; (iv) Capacity for poverty targeting and poverty graduation implementation; (v) Capacity and experience in Climate Smart Agriculture; (vi) capacity to work with credit services providers and public sector extension service providers and leverage other sources of development funding in target communities; (vii) existing presence in the project target areas will be an advantage;

To ensure availability of all the capacities listed above, the IPs may form a joint venture or consortium with other specialized service providers as equal partners or sub-contractor arrangements. However, in either case, the lead agency will be primarily responsible for delivery of assigned tasks. IPs, with assistance from field staff of Agriculture Department and Livestock & Fisheries Department, and under the supervision of PMU's sector specialists, will identify the target villages in three districts as per project selection criteria, organize the Villages, identify and organize Interest Groups and develop value chain plans for identified groups and commodities

through a participatory approach. In addition to IP's own inhouse expertise, external service providers like FAO and research institutions may be engaged for training, capacity buildings and technical assistance. An initial target community and commodity profiling, demonstrating community eligibility in terms of project targeting criteria and value chain development potential, will be submitted by IPs to the PMU for approval.

- (b) **Extension Support Services:** PMU will engage services of public sector extension service providers and MOUs will be signed with these service providers clearly defining the roles and responsibilities and outputs. Exact scope of work will emerge from the VOs and interest groups' development plans. Performance against MOUs will be annually reviewed and placed before PSC with recommendations by PMU. The extension services providers include Agriculture Extension and Research and Livestock and Fisheries Departments. Additional public sector service providers may be engaged by PMU on need basis as the project evolves and needs emerge. Project will provide resources for the capacity building of extension departments' field offices which will cover some basic office equipment, mobility costs of staff, staff training, and project related operational overheads for field, Taluka and District level offices. The departments will notify staff seconded for implementation of project activities at Taluka and Union council levels. The seconded staff is expected to provide demand-based agriculture, livestock and fisheries/aquaculture extension services to beneficiary VOs/interest groups, in collaboration with IPs, as per their development plans. They will have experiences or/and be trained in Climate Smart Agriculture. Specific attention will be given to the extension service in Badin, skilled in Climate Smart agriculture under the GCF/FAO project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management" (2020-2026). Badin Extension Service could appropriately train other extension services and service provider in this matter. At minimum, a district level focal person will be notified as part SCRP District Coordination Committee headed by District Coordinator and one focal person at Taluka level and one field extension staff for each target Union council. Cost on community trainings and demonstrations for crops, high value products, processing aggregation, fisheries, aquaculture and transversal aspects is budgeted under sub-component 1.1.
- (c) Project may engage additional specialized extension and research service providers on need basis against specific TOR and outputs. Public and private service providers engagement will be on the basis of proven capacity and experience with regards to supporting resilient VC and business opportunities. Their existing skills and know-how will be considered to deliver better support to targeted groups in the three districts.

B. Component 2: Economic and Social Inclusion of Disadvantaged Groups

179. The objective of this component is to assist the rural landless poor to sustainably increase their incomes and get out of poverty trap and assist young women and men from poor families to learn skills for job market and/or self-enterprise. It is expected that these vulnerable groups will become more resilient to climate hazards as a result of increased and diversified incomes and capacity, and training included in this component. The component consists of two sub-components: (i) Economic Graduation of Landless Poor, and (ii) Job Market Integration of youth. Target households for both interventions are those having poverty score 0-32 on NSER. Each household will be eligible for one benefit under either of the two sub-components, depending on each household's circumstances and potential. Each household will be profiled on the basis of Livelihood Improvement Plan (LIP) templates already in vogue under NPGP to assess the best fit for them keeping in view the income generation opportunities in their vicinity and market demand. The target household identification, household profiling and LIP development will be the responsibility of IPs social mobilization staff. The LIPs quality and feasibility will be assessed by IPs technical experts and forward it to DCU with their recommendations. Particular attention is paid to avoiding damage to the ecosystem (particularly in the provision of livestock to avoid overgrazing or waste-generating activities) and, on the contrary, to promoting environmentally friendly jobs/income generating activities (see Green Jobs below).

180. **Sub-Component 2.1 Economic Graduation of Landless Poor:** Target families will be provided with one or more income generating productive assets, for one or more than one member of the household, within budget ceiling of US\$ 500. Assessment will be carried out keeping the whole family in view rather than just the BISP beneficiary woman. The assets will be matched with overall household abilities, and operative livelihoods and market environment. Nature of the asset will be such that it quickly adds to the income of the family. It can also be an asset or device that enables the family to take advantage of the income generation opportunities within the supported value chain e.g. a handheld reaper or mechanical tiller or a sheller or a processing, value addition or haulage equipment to connect farmers with the local markets, equipment to collect organic waste and produce compost, equipment to produce other agricultural organic inputs, In other cases, it can be an asset for off-farm income generating potential e.g. quality production of traditional crafts. Priority will be given to green jobs contributing to the local circular economy, reducing dependence of smallholders and rural economy to external suppliers of food, feed and inputs, as well as improving agency, nutrition and climate adaptation of poor communities. Poor sharecropping families will be assisted to shift to leased land arrangements for greater profitability and economic independence. Learning lessons from other programmes implementing similar interventions, provision of livestock assets should be choice of last resort and not the first one. Livestock is prone to high risks, adds to additional costs for the poor household in shape of feed and shelter, and takes considerable time before it generates any income. Around 30,000 households will be assisted. Per beneficiary costs will be reviewed annually by PSC to ensure that it remains compatible with the market situation.

181. **Sub-Component 2.2 Job Market Integration of Youth:** The sub-component is aimed at achieving job-market readiness for the young men and women from poor households through provision of vocational, technical and enterprise skills. These young men and women will be selected from households other than those who received productive assets. The skills will be aimed at either finding remunerative salaried jobs or starting an income generating self-enterprise based on the learned skill. Some of these could be the skills and vocations linked to the supported value chains. Project support will cover both training costs and, for those opting for a self-enterprise, a start-up grant to cover cost for a starter set of implements, a rented space etc. Choice of vocations and technical skills will be guided by a rapid baseline Labour Market Survey and availability of appropriate courses and training facilities within the project target area. STEVTA and other appropriate training service providers will be engaged for the purpose under performance-based MOAs. Some skill acquisitions will complete the provision of productive asset (Sub-Component 2.1). Imparting of digital skills, particularly e-commerce, will be encouraged for young people with appropriate educational qualifications. In such cases, project will finance provision of a computing device and internet modems. Persons trained in digital skills will be further encouraged to facilitate online marketing of products made in the community and by other trained peers and recipients of productive assets. The IPs and service providers will be required to facilitate the pass-outs in finding salaried jobs or starting own enterprise based on the learned skill. Project will also encourage group-based enterprises where young men and women of similar interest and skills will be assisted to start an enterprise linked to value chain and other local market opportunities. Project will incur, on average, a per beneficiary cost of US\$ 350 and total 43,000 youth will be assisted, of which at least 40 percent will be women. Based on experience in other IFAD projects (SPPAP/NPGP), actual cost per beneficiary is likely to be less in case of a beneficiary getting skills training only and finding a job while those opting for self-enterprise will cost more due to dual element of training cost including stipend and a start-up grant. The approach and per beneficiary costs will be reviewed annually by PSC on the basis of experience and market situation.

182. **STEVTA Training Service Delivery:** STEVTA is the main technical and vocational training service provider in the project area. Experience in other projects (SPPAP, NPGP) has shown that most of the youth from target poor families do not meet the educational qualification requirements of regular TEVTA courses and need tailored training courses in terms of duration and curriculum. Such courses will need to be developed or adapted from ongoing courses in other projects like SPPAP and NPGP. Institutional support budget for TEVTA or private sector service providers is meant to enable service

providers to develop need-based curriculum and supportive training materials and delivery mechanisms for that purpose. In particular, in case of female trainees, given their travel and stay constraints, some of the courses will have to be delivered in-situ for trainees from a cluster of villages. The allocated budget will meet those additional costs for arranging in-situ training and daily travel.

183. STEVTA will notify focal persons at Provincial, District and Taluka level for coordination with PMU and DCUs strategy development, annual planning and budgeting, course content development and beneficiary selection and training.

184. Eligibility and technical parameters for vocational and technical training is contained in following table:

Eligibility and Technical Parameters for Training Interventions

#	Major Activities	Target	Eligibility and Technical Parameters
1	Skills Development for Job Market and Self-Employment	43,000	<ul style="list-style-type: none"> i. Ultra-poor and poor households with limited to no access to land with poverty score within the band of 0-32 (40 percent females) ii. STEVTA will be supported to assess and adapt to the most recent market requirements in terms of training and / or to add additional demand-based trainings to their existing trainings. iii. STEVTA will also be supported to develop partnerships with local industry/entrepreneurs/businesses for assessing demand; iv. STEVTA shall be supported in establishing partnership with public and private service providers to design and deliver the trainings currently not available at STEVTA v. For women, STEVTA will also ensure organising training at local level where the women could conveniently commute on daily basis, either through its own institutions or by engaging suitable public and/or private service providers. vi. Where STEVTA outsources trainings to public/private institutions, SCRCP will pay for the cost of trainings directly to such institutions, while the start-up capital for self-enterprise shall be provided by PMU to Trainees through IPs.
4	Self-employment/Enterprise Development (about half of the trained beneficiaries for skills development)	21 000	<ul style="list-style-type: none"> i. Start-up capital (USD 300) per beneficiary to be provided; Linkages to be established with SCRCP's subsidized loan programme; ii. Trade selection subject to gender, demand for skills and entrepreneurship in district iii. Trainees shall also be given coaching in business planning & development, financial education, financial management, market access and access to existing financial services and business incubation in the form of hand holding during the initial period of enterprise/business establishment.

185. **Indicative list of productive assets based on experience in similar initiatives in other projects:** Following are the types of productive assets most likely to match the circumstances of beneficiaries and the surrounding environment:

- (a) Small enterprise producing inputs to local VCs: compost, biochar, biopesticides, tree seedlings, fry, fish feed, fodder from tidal areas, etc.
- (b) Small

- (c) Small enterprise category: Hand-carts to sell fruit, vegetables, ice-cream/falooda etc.
- (d) Small Shops: Cloth shops, crockery shops, tuck shop, tea stall, tailoring shop, electrician/plumbing shop, grocery/karyana store, mail/sweets shops etc. mobile repairing shop.
- (e) Transportation: auto-rickshaw, loader rickshaw, chingchi rikshaw, bike and drums for milk transportation (specific attention for transport service meeting the need of local VCs)
- (f) Service provision: Barber shop, catering, mobile repairing, hand tractor/reaper/harvester, motorbike repairing shop.
- (g) Livestock: Buffalo, cow, goats

186. Indicative list of vocational and technical trainings based on experience in similar initiatives in other projects:

- (h) E-commerce, digital marketing, QuickBooks, AutoCad, WordPress, Graphic design, Creative writing, Fiver, Amazon based marketing etc. the training package will include a computer/ laptop and internet device.
- (i) Community Livestock Extension Workers
- (j) Carpentry
- (k) Electrician
- (l) Beautician
- (m) Plumbing
- (n) Mobile Repairing
- (o) Dress designing/tailoring
- (p) Solar and UPS repairing
- (q) Driving
- (r) Motorbike repair

C. Component 3: Project Management and Policy Support

187. An autonomous and empowered Project Management Unit at Karachi, administratively linked to P&D Board, and reporting to Project Steering Committee, will be responsible for project planning, coordination, financing, monitoring and procurements. Chairman P&D Board will head the PSC and the rest of membership will be drawn from relevant line departments, Finance Department and civil society. A competitively selected Project Director will head the PMU, supported by adequate number of professional and technical support staff including finance, procurement, infrastructure, agri-business development, climate, gender, nutrition and M&E.

188. A District Coordination Unit in each of the three target districts, headed by a competitively selected Project Coordinator and supported by a small team of professional and support staff, will be responsible for planning, coordination, monitoring and reporting of project activities based on Project's AWPB. Partner government implementing agencies will nominate dedicated activity managers at provincial and district levels, and specified field level staff, for project related activities. Scope of work of these agencies will emerge from VO and Interest Groups' plans and will be used as a basis for MOU/As between PMU and implementing agencies. Project will finance necessary operational and input budgets identified in the MOU/As for the work related to these agencies. Some other private and public sector and specialized agencies like FAO may emerge as implementing partners on the basis of VO

development plans and technical and vocational training activities. PMU will engage them subject to detailed TOR and financial terms duly approved by PSC and subject to IFAD No Objection.

189. To avoid the risk of start-up delay, the core PMU staff (Project Director, Finance Manager and Procurement Manager) and the District Coordinators and Accounts Officers will be recruited three months prior to project effectiveness so as to complete the preparatory activities like preparation and approval of first year AWPB and Procurement Plan, identification and hiring of PMU and DCUs buildings, recruitment process initiation for support staff, orientation of public sector partners and procurement of IPs services.

190. The organization Chart of the project is at **Annexure-1: Organizational Chart Job Description of Key Positions.**

191. **Sub-Component 3.1 Policy Support and Innovation Challenge Fund:** Project will support the provincial government in some key areas of project relevance for policy review and reform. These may include policy review and dialogue on tenancy and land tenure arrangements, regulations for housing land ownership rights and provision of civic services in coastal buffer zone communities, agriculture and rural development credit, agriculture marketing and service provision standards and enforcement mechanisms, Farmer organizations representation, climate adaptation, etc.

192. Innovation Challenge Fund will be administered by the PMU to identify innovative and cost-effective solutions that contribute simultaneously to improved production, marketing and climate resilience. Some indicative areas for solution development under the challenge fund are: agriculture waste/residue management (e.g. saline agriculture, fodder production in tidal area, rice straw is currently burned in the fields contributing to pollution and smog – how local poor/youth can convert it into remunerative products; processing of banana plants residues; local formulation and cost effective production of feed for fish and shrimp, cost effective models of household latrines etc.). Solutions that contribute to improved nutrition, empower women or provide job opportunities to young people will be prioritized. This challenge funds should be initiated sufficiently early in project implementation to allow possible scaling up via component 1 or 2. Farmers and VOs will also be eligible to compete for this fund, as well as NGOs, public sector and private MSMEs jointly with VOs or farmers.

193. **Fund Management:** PMU will establish a broad-based Fund Management Committee (FMC) with the approval of PSC. PD will be the convener of Committee and rest of membership will be drawn from Finance Department, P&D Department, partner public sector extension services, IPs, some eminent academics and researchers in environment and agriculture processing industry and provincial environment and climate change department. The Committee will define the scope and key thematic areas/ rural agriculture and environment challenges for the deployment of fund. The themes and terms of reference for each theme will be presented to PSC for approval, and to IFAD for No Objection, along with timeline/sequencing and tentative budget for each theme. Once approved by PSC, and as per approved schedule, PMU will prepare the advertisement and terms of reference, in consultation with Fund Management Committee members and advertise through print media and PMU and P&D website, for invitation of EOI. A sub-committee of FMC will be constituted to examine the EOIs and short-list the most promising ones. The short-listing will be presented to FMC for approval. The sponsors of approved EOIs will be invited to furnish detailed technical and financial proposals. A minimum of 45 days will be given to them for submission of proposals. The technical and financial proposals will be examined by same sub-committee than examined EOIs and will furnish its recommendations to FMC. Upon FMC approval, the successful proposal will be shared with IFAD for No Objection. Once IFAD No Objection is received, an agreement will be signed by PMU with the sponsors of successful proposal and funds will be released as per the payment schedule included in the agreement. Subsequent payments will be linked to achievement of milestones furnished by sponsor and incorporated in the agreement. PMU and DCUs monitoring staff will closely monitor the progress and achievement of milestones. And periodic payments will be subject to certification by M&E staff of

achievement of milestones. Final payment will be subject to completion of agreed outputs and submission of completion report and its approval.

194. The main contents of various documents involved in Fund Management are:

- (s) *Theme Selection Proposal*: (i) Identified challenge or issue; (ii) Its importance, relevance or impact on rural agriculture economy/environment or climate resilience of rural populace or vulnerable segments of rural population including poor, women, youth, children; (iii) How a replicable/scalable solution can positively contribute in social, economic or environmental improvements in target districts and/or province at large;
- (t) *EOI Submission*: The EOI submission by interested institutions and/or persons should include: (i) their understanding of the theme/challenge and how it impacts concerned persons and/or sectors; (ii) profile - their technical capacity, experience and previous contributions with regard to this theme; (iii) Their own contribution – in physical and financial terms for the conduct of exercise; (iv) their comparative advantage compared to competition.
- (u) *Detailed Technical and Financial Proposal*: The detailed technical and financial proposal should include: (i) Profile; (ii) understanding of the task at hand; (iii) Methodology and approach; (iv) Activity plan including sequencing and timelines; (iv) proposed sites/communities for implementation; (v) intermediate and final performance indicators and milestones; (vi) Detailed budget for inputs and remunerations linked to milestones and outputs; (vii) Final outputs and expected outcome/product; (vii) Proposed manpower, deployment pattern and duration, responsibilities and their CVs;

195. **Component 4 Recovery from Climatic Calamities (RED Component)**: Acknowledging the region's vulnerability to floods and water scarcity, the project includes a Response to Emergency and Disaster (RED) component. In case the Government of Sindh declares the project area (in total or part) affected by a climatic calamity like floods, cyclones, an earthquake or widespread pest attack (locusts), the project is authorised to trigger the RED Component. The RED component serves as an essential buffer, ensuring the project remains resilient and steadfast in achieving its objectives amidst sudden shocks in the coastal regions of Sindh.

196. **Triggers and Process**: The trigger for the authorization will be the formal declaration by the Government of Sindh of the project area or part of it to be calamity-hit. After the formal declaration, the Government will send a formal request to IFAD indicating the amount that needs to be reappropriated/authorized to be utilized for emergency response. Once received, IFAD will work closely with the project and the relevant government counterparts to define the specific actions.

197. **Total Authorized Amount**: The Government may request up to 15% of the total approved IFAD financing to be reallocated to the RED Component. The proposal shall identify the cost categories of the Financing Agreement that will be reduced, as applicable, as well as those that will be increased because of the reallocation.

1. Exit and Sustainability Strategy

a) Component-1 Transformation of Coastal and Rural Incomes

198. The specific strategy for successful exit under component 1 revolves around 3 main elements namely 1) Establishment of business oriented and capacitated farmer organizations linked to markets, 4Ps and public sector extension services 2) a village and interest groups owned and managed community and value chain infrastructure; and 3) financial inclusion of currently un-bankable through initial subsidized loan products and then linked to formal sources of credit. All three (3) elements collectively have the potential to overcome the main constraints faced by agricultural economy and

land owning and landless households and, establish a capital base and linkages to sustain the activities beyond project life.

199. Under first element, the establishment of inclusive VOs under an umbrella development plan that identifies specific interest groups against uniformity of production base and vocations, addresses priority community and value chain infrastructure deficits, helps in production, productivity and quality gains and establishes robust links with private sector and public sector service provision.

200. The VOs and Interest Groups will be assisted with a comprehensive capacity development program so that they develop a market-oriented approach to maximise their output from existing production base, adapt to market demanded products, develop capacities for collective procurement of quality inputs and collective marketing and reach a scale where they can enter into win-win 4P partnerships. Through provision of inclusive credit services by partner financial institutions, backed by financial literacy and enterprise training, the interest groups and their members will become part of formal financial system and establish a credit history which would enable them to access formal lending facilities upon completion of the project.

201. Finally, the establishment of 4Ps will promote establishment of rural infrastructure (Collection centres, dryers etc.) in villages as private sector may invest in such facilities to streamline their supply/value chain activities. This would enable technology transfer from private sector to grass root levels in a healthy manner. In addition, it's expected that farmers groups would develop greater understanding of the market dynamics during the implementation of those 4Ps enabling them to continuously adjust their production choices and products as per changing market trends. Further, the strategy promotes strengthened linkages between public sector service providers and rural communities which would run even after the project period.

b) Economic and Social Inclusion of Disadvantaged Groups

202. The project seeks to assist STEVTA become a dynamic technical and vocational education provider that reads market trends and has capacity to design and deliver such courses effectively. The project will enhance Institutional capacity at STEVTA to conduct labour market assessment and design and deliver course demanded by the market and, at the same time, tailor special courses for the less literate youth from poor households.

203. All technical and vocational trainings shall be based on labour supply gaps and where viable-complemented with start-up capital to enable trainees to have sustainable self-employment. Further, trainees shall be linked with government's low-cost microcredit programs i.e. Kamyab Jawan Program to facilitate further business development/expansion as appropriate. Youth with appropriate educational qualifications will be imparted digital skills and e-commerce training to help market products and crafts from their villages through e-shops.

2. Project Management and Policy Support

204. The project design elaborates on the roles and responsibilities of various stakeholders; focuses on institutional reforms and strengthening; and enhancing partner government department's capacity. The policy and institutional development initiatives of the project are not only aimed at ensuring successful implementation and exit strategy of the project but also to mainstream and institutionalise the project approaches and models in the functioning of public sector institutions for scaling up and to adapt to market realities on long term sustainable basis.

- i. **Agriculture Extension:** To enable the Department of Agriculture to support project implementation and reorientation for demand-based service delivery in an efficient manner, support will be provided to strengthen its capacities through provision of equipment, training and mobility of staff.

- ii. **Livestock and Fisheries:** The department will be provided support to enhance its capacities and outreach for provision of extension support to livestock and fisheries interest groups for enhanced and sustainable production, prevention of diseases and post-harvest losses and get better returns on their investment.
- iii. **Technical and Vocational Training:** The Skills development and Employment Promotion component builds mainly on the existing public and non-government organizations' capacities of TVET and consolidate them where required, rather than creating new, programme-driven structures. This is aimed at supporting sustainability and ensuring that project innovations will be mainstreamed into the province institutional framework, replicated and scaled up.
- iv. **Nutrition.** Special attention will be paid to improving the nutrition outcomes in the target districts through training, mapping of nutritionally superior indigenous foods, adoption of fortified crops, promotion of home vegetable gardens, creating awareness on optimum nutrition and WASH practices at the village level and provision of promotional materials and guides. Among other things, the policy and action plans shall set out guidelines related to selection of nutrition sensitive value chains, creating nutrition related awareness. Strong linkages with ongoing nutrition initiatives like PINS and WFP will be pursued.

SECAP Compliance

205. **Environmental and Social risks.** The project does not include activities of size or scale that would have significant negative social and environmental impacts rather, there will be positive impacts on the livelihoods and economic wellbeing of the community. VO members will also include poor and women to ensure that the benefits are shared and livelihoods are improved. Moreover, the interventions do not involve any large-scale infrastructure or civil works to warrant any economic displacement or resettlement of the communities. No diverse impact is foreseen on the flora and fauna and biodiversity. Therefore, and based on the social and environmental risk assessment, the ES risk of the project is categorised as Moderate.

206. **Climate risks.** The project areas exposure to climate change is high, with frequency of extreme weather events increasing over the recent past with considerable impact on beneficiaries, targeted areas, ecosystem and community resilience. Therefore, the Climate Risk Category is assessed as Substantial. Any proposed future interventions by farmer organizations and 4Ps will be subject to screening and will be implemented under appropriate guidelines and SOPs.

a) Environment Social and Climate Management Plan (ESCMP)

207. **The** IPs will be developing business plans for VOs/Interest Groups in consultation with selected farmers' representatives after a thorough diagnostic study for identifying potential interventions, market assessment and skills requirement. These business plans will be developed with proper projections on various aspects for three years and will be implemented under the close supervision of IPs and extension services. Technical viability, skills and technology requirements of hardcore activities (e.g. processing plants, drying and packaging facilities) as well as soft activities (training, services, market opportunities) proposed under the business plan will be assessed for SECAP compliance. Mitigation measures as provided in ESCMP will be implemented to avoid or minimize any social and environmental impacts.

208. To guide the project teams—at PMU/DCUs as well in IPs and partner extension agencies, this Project Implementation Manual includes an Environment Social and Climate Management Plan (ESCMP). The ESCMP indicates main themes of social/environment/climate risks, and recommended mitigation actions. The Environmental and Climate Change Specialist in PMU will look after and monitor

SECAP related compliance under the project and implement the Environmental, Social and Climate Management Plan. The Specialist will check and assess every relevant activity in the business plan and prepare a report recommending or rejecting the proposed intervention with proper justification and reasoning. Regular monitoring of activities with physical visits and feedback from district offices should be carried out with proper record and report to be summarized in the project progress reports including compliance status, challenges and issues. Detailed guidance for PMU/DCUs/IPs etc. is provided in **Annexure-11: Environmental, Social and Climate Management Plan (ESCMP)**.

b) Stakeholder Engagement Plan (SEP) and Grievance Redress Mechanism (GRM)

209. PMU/CDU as well as IPs, during the whole project implementation, must pay attention to the Stakeholder Engagement Plan. Stakeholder engagement aims for better mutual understanding, increased trust, stronger relationships, better risk identification and management (in conjunction with ESCMP), meeting legal obligations, increased support, a social license, and better-informed decisions. The purpose of the Stakeholder Engagement Plan (SEP) is to prepare a strategy and a plan for consultation with the Project stakeholders, obtain their perception and feedback on project interventions, proposed mitigation and adaptation measures to address the potential project risks, and their views and recommendation on the Project interventions. SEP is also a lever to ensure the project meet the needs of the population and involves them fully.

210. The SEP includes a Grievance Redress Mechanism (GRM). Its purpose is to provide project stakeholders with accessible and inclusive means to raise issues, concerns and grievances and allow the project leadership structures to respond and act upon them in a timely, effective and transparent manner that promotes a good direct and indirect stakeholder relationship and a harmonious atmosphere. All stakeholders should be able to mobilize the GRM for any concerns they may face through the project activities.

211. These two documents can be found in Annexure-21: Stakeholders Engagement Plan (SEP) & Grievance Redress Mechanism (GRM).

IV. HUMAN RESOURCE MANAGEMENT

A. General

212. The project shall develop standard employment contract for each category of personnel so as to ensure that all personnel are recruited on identical terms and that employment conditions are adequate to meet the requirements of the project. The project will hire the below categories of personnel:

- Project personnel who are core members of the PMU and DCU teams; this includes: professional, operations and support staff.
- Temporary professionals and support staff hired locally to replace an absent staff, to cater for a temporary increase in workload, or to fill a vacant post temporarily.
- Individual consultants hired nationally or internationally to carry out a specific short-term assignment.

213. The recruitment of senior staff within the project will be carried out with technical assistance (as needed) and oversight of IFAD. At the start of the project, P&D Board shall handle the recruitment of the core project staff. Once the senior personnel recruited, the PMU is in charge of staff recruitment and contract administration. Generally, the recruitment of senior staff within the project personnel is carried out with technical assistance (as needed) and oversight by IFAD.

214. The recruitment and personnel administration differ according to the category of personnel and the type of contract used. However, all personnel of the same category benefit from the same treatment. Project staff are normally subject to the Pakistan labor laws. However, wherever rules or procedures contained in the financing agreement and/or in the present manual are in contradiction or incompatible with the national labor laws, the financing agreement and/or labor laws of the land shall prevail.

A. Preparation for recruitment

215. The identification and selection of candidates must be carried out in an objective and transparent manner, using a competitive process so as to identify and select the candidate best qualified to fulfil the function. It is therefore critical that the personnel selection and recruitment process be fully documented.

216. Terms of reference, (ToR) or job descriptions are required prior to advertising any vacancy for the SCRP. The supervisor/section head at PMU is responsible for preparing the ToR or job descriptions for the personnel required. These documents are used for describing the work that will be performed by the individual hired; they also provide the basis for the identification of potential candidates as well as the necessary information for determining the level of the functions and the appropriate remuneration. Once the position is filled, the ToR or job description also provides the basis for supervising and evaluating the performance of the incumbent's work.

217. The Job Description (JD) for key positions shall include following information:

- i. Functional title of the position
- ii. Title of the supervisor(s)
- iii. Duty station(s)
- iv. Classification level of the post;
- v. A detailed description of the tasks/functions/work to be accomplished;
- vi. Indication of staff to be supervised by the incumbent (if any).

B. Advertisement & Selection

218. The second step in the selection process is the publication of the vacancy announcement (VA), prepared together by the Manager HR from the TOR/job description and containing:

- i. The reference number of the vacancy announcement (sequential numbering);
- ii. A short description of the Programme, including information on the IFAD and the GoP;
- iii. The title of the post, duty station, type and duration of contract.
- iv. A summary of the duties and responsibilities of the function;
- v. The minimum experience and qualifications (both academic and professional) required for the post
- vi. A clear distinction shall be made between “minimum requirements”, the absence of which would lead to automatic disqualification of the applicant,
- vii. The list of documents to submit as part of the application (CV, cover letter, copies of diplomas
- viii. A contact person and address for the submission of application closing date for applications;

219. Job notice should be widely advertised in the print media and on the website of the project/provincial government. A committee should be constituted for review of application, short-listing and recommending best candidate for recruitment against the available position. The process should be properly documented. IFAD’s No Objection should be sought invariably for all key positions before initiating recruitment and issuing offer letters.

C. Recruitment of individual consultant/consulting firms

220. The recruitment of individual consultants/consulting firms shall be subject to the procedures and prior review of IFAD as spelled out in the financing agreement and the Letter to the Borrower. Details are provided in the project Procurement Manual for recruitment of project staff and consultants/consulting firms and procurement of goods and services under the project.

D. Remuneration Package

221. The level of a function is determined on the basis of an evaluation of the complexity of the tasks, the level of responsibility, and the degree of expertise required to perform the job. The level of remuneration of the incumbent is determined based on the level of the function and the relevant experience and qualification of the individual.

222. The remuneration in the salary scales are given in the cost tabs (expressed as gross salaries that are inclusive of income taxes and Employee’s Old-age Benefits Institute-EOBI withholdings). All adjustments or increases in salary on annual basis shall be proposed by PMU for IFAD no objection, afterwards to be submitted for PSC approval. In case of difference in proposed salary increment, decision of PSC shall prevail. Salary increment is separate from performance bonus based on appraisal. If IFAD and PSC approve increment, it should be across-the-board due to inflation. The salary of project staff/consultants shall be subject to annual review as part of annual performance evaluation of staff/consultants. During Mid-Term Review, salaries of all staff would be subject to revision. All salaries are payable in Pakistani rupees.

223. According to national legislation, salaries in Pakistan are subject to deductions for EOBI (employee contribution) and income tax. The Programme makes these deductions at source. The employer contribution on EOBI is paid from Programme funds. All full time Programme staff below the age of sixty must be registered with the EOBI institute.

224. Project staff are entitled to 24 working days of annual leave per year, not convertible in cash (except upon contract termination). On contract termination a maximum of thirty 30 days annual leave only shall be paid in cash; any leave balance above 30 days is lost.

225. All Programme Personnel are entitled to life insurance coverage and Health Insurance (covering also their spouse (s) and children below age of 18 years) upon entry on duty and until contract termination. Health insurance only provides coverage for hospitalization costs.

E. Performance Evaluation

226. Performance evaluation of project staff/consultants should be based on the job descriptions. The process must also serve to appreciate the staff's professional qualities, competence, and productivity, work attitude (team spirit, relationship with colleagues and partners, etc.) and leadership skills (creativity, sense of initiative, supervisory skills, etc.). The evaluation should consider the following six (6) parameters:

- i. Evaluation by the direct supervisor based on the objectives set at the beginning of the year, and the main duties and responsibilities mentioned in the TOR, as well as complementary evaluation if applicable;
- ii. Self-evaluation based on the objectives, with an indication of constraints and difficulties faced during the year, and areas to be improved;
- iii. Overall score and recommendations by the direct supervisor (and complementary evaluator, if any) on the renewal of the staff's contract. This section may include comments from the staff, if any;
- iv. Objectives for the coming year (based on the AWPB and staff TORs) in order of priority, with a summary of tasks to carry out, expected results and timing for implementation;
- v. Training & development plan based on results of the evaluation (if needed);
- vi. Final comments and recommendation by the evaluator for contract renewal, salary increase, etc.

227. The evaluation is discussed during a meeting between the staff and his/her direct supervisor. The performance evaluation form must then be signed by the staff member, the supervisor and, if applicable, the complementary evaluator. In case of disagreement, the staff member may write down his/her comments on the form before signing it.

F. Renewal of Contracts

228. Employment contracts of project staff shall be subject to annual performance evaluation and renewal. All decisions of renewal/changes in terms of contracts shall require subject to IFAD's No Objection after the approval of the PSC.

G. Leave Policy

229. The project staff is entitled to up to 12 days of casual leave subject to prior notice and approval by his or her supervisor. The casual leave shall be admissible only in extra-ordinary circumstances such as death and/or serious medical condition of the employee's spouse, child and parent. PMU shall follow the normal rules and procedures of leave applicable to provincial government employees.

H. Procurement Management

230. The main purpose of this procurement manual is to enable SCRP implement procurement activities in accordance with the guidelines of the Sindh Public Procurement Regulatory Authority

(Sindh-PPRA) Rules and Regulations and IFAD Procurement Guidelines 14 and IFAD “Policy on Preventing Fraud and Corruption¹⁵ in activities and operations”.

231. The module describes the rules and procedures applicable to the procurement of goods, works and services for SCRP. Procurement financed from IFAD funds shall only be carried out during the Project implementation period, i.e. from project effectiveness to project completion. The applicable procurement modalities will be defined in the Financing Agreement and Letter to the Borrower. This manual describes the modalities and procedures to be used for implementation of the Project. It also provides a comprehensive set of guidelines, tools and templates/formats, to facilitate project implementation and management from inception through to closing. It covers all procurement aspects i.e. procurement planning to contract awards, contract management & monitoring, selection of project staffing and their responsibilities. Therefore, it requires compliance on the part of project management and staff.

232. The project provides for a qualified and experienced team of Procurement Specialist, and Contract Management Officer to lead the procurement function. In addition to these permanent positions, the project design envisages that partners/service providers—that will be engaged to support implementation shall have a strong technical capacity for procurement and financial management. This is critical since these partners will use IFAD’s funds and therefore they must comply with the applicable fiduciary requirements. PMU and RCUs will ensure effective facilitation, oversight and monitoring of these partner organizations.

I. Principles of Procurement

233. The PMU must comply with the following principles:

1. Ethics

234. The guiding principles of ethical behavior are impartiality, independence and integrity. No person or entity shall use his/her/ its authority, position or office for personal gain, which will be defined as soliciting, accepting or otherwise benefiting from anything of material value, in any form, either in person or indirectly through close relatives or associates, as a result of procurement financed by IFAD.

235. The Project Management Unit (PMU) staff have a duty to:

- a. Maintain the highest standards of honesty and integrity in all relationships;
- b. Develop the highest possible standards of professional competence;
- c. Maximize the use of IFAD funds and other resources for which they are responsible for the purposes for which these funds and resources were provided to the Project;
- d. Comply with both the letter and the spirit of the Financing Agreement, the laws and regulations of Government of Pakistan/Sindh, accepted professional ethics and contractual obligations;
- e. Declare any personal interest that may affect, or might reasonably be deemed by others to affect, impartiality in any matter relevant to their duties (conflict of interest). In a situation of this nature, the official concerned will not participate in any way in the procurement process, to avoid mis-procurement; and

¹⁴ <https://www.ifad.org/en/project-procurement>

¹⁵ www.ifad.org/anticorruption_policy

- f. Respect the confidentiality of information gained in the course of duty and not uses such information for personal gain or for the unfair benefit of any bidder, supplier or contractor. Information given in the course of their duties shall be true, fair and not designed to mislead.
- g. Accountability. PMU is accountable to IFAD for all actions and decisions in relation to Project-funded procurement. This includes, but is not limited to, ensuring that:
 - a) The funds are used solely for the purpose for which they were provided; and
 - b) Procurement is undertaken in accordance with this Module.

2. Competition

236. Full, fair and legitimate competition among eligible suppliers and contractors is the foundation on which project-funded procurement activities will be based. The most common method of seeking competition is through a competitive bidding process, and, in this regard, SCRП specifies that all goods, works and services will be obtained through an agreed procurement process involving at least three separate suppliers or contractors whose business is directly related to the procurement being undertaken.

- i. The project will therefore promote genuine competition at every opportunity and will provide evidence of:
- ii. fair and genuine competition in the compilation of shortlists and in the solicitation of bids; and
- iii. the effectiveness of competition during the bidding process
- iv. Single sourcing and direct contracting do not provide the elements of competition required by IFAD. Only in exceptional circumstances will these approaches be considered and approved in procurement plans agreed with IFAD.
- v. Notwithstanding the above, PMU recognizes that it is neither practical nor efficient to advertise internationally for low-value contracts for goods, works or services, and the degree to which the principle of competition is required for each procurement activity will be outlined in the procurement method approved by IFAD within the approved procurement plan for each year.

3. Fairness

237. PMU expectation is that Project-funded procurement will be open to as many eligible bidders as is practicable in order to meet the requirements of competition. SCRП will ensure that all prospective bidders are:

- i. Managed with a consistent approach and application of laws, regulations and requirements in respect of the procurement process;
- ii. Offered a level playing field on which to genuinely compete offered a level playing field on which to genuinely compete; and
- iii. Treated in a fair, impartial and unbiased way, so that principles of impartiality and equal opportunity can be demonstrated in all procurement activities.
- iv. In striving for fairness in its procurement operations, the Project will:
- v. Not tolerate exclusion of, discrimination, bias or prejudice against, or favoritism or inequality towards any potential supplier or contractor, either directly or indirectly through manipulation of any part of the procurement process, including, but not limited to, the preparation of technical specifications, evaluation criteria or bidding requirements; where

any such activity is suspected or proven, PMU reserves the right to take any preventative, corrective or punitive action it considers appropriate;

- vi. Seek to address, any impositions that may deter or impinge on the attainment of fairness within the procurement process.

4. Transparency

238. Because a lack of transparency can be perceived as an attempt to withhold information, which in turn may make the fairness and integrity of the procurement process suspect, the Project will ensure the highest degree of transparency and openness within the procurement processes it undertakes. Transparency within procurement relates to disclosing, in the public domain, information for parties involved, interested in or affected by the process, including but not limited to information on:

- i. the availability of potential and existing procurement opportunities;
- ii. where to access relevant data;
- iii. the processes by which the procurement is being undertaken;
- iv. the mechanisms by which contracts will be awarded;
- v. contract award data; and
- vi. appeal procedures
- vii. Modes of communication/publication of such information will vary depending on the nature of the data but will generally be through existing means of public information (e.g. government websites, public notice boards or media) or in the procurement documentation relevant to an individual procurement activity (e.g. bid notices and bidding documents). The Project will act openly, predictably and in accordance with the information provided.

239. Efficiency, Effectiveness and Economy. SCRP will demonstrate efficiency and economy in undertaking Project-related procurement, to avoid undue implementation delays and to achieve value for money. Procurement will be well organized, carried out correctly with regard to quantity, quality and timeliness, and at the optimum price, in accordance with the appropriate guidelines, principles and regulations. Processes will be proportionate to the procurement activity, so that the overall cost of conducting the procurement process is minimized and tailored to the size of the budget for the activity being undertaken, while upholding the guiding principles. Efficiencies may be obtained through a combination of methods. For example, a strategic approach can be taken to planning, combining and conducting procurement activities so as to minimize loss of time and resources.

240. Value for Money: Underpinning all of the above is the need to obtain value for money for all Project procurement activities through the optimum combination of several factors, including:

- i. applying sound, internationally recognized procurement principles;
- ii. ensuring that the goods, works or services procured meet the requirements for the task and are not over specified;
- iii. ensuring that the goods, works or services are contracted on the best possible terms, taking into account their expected life cycle; and
- iv. ensuring that the provider/supplier of the goods, works or services is qualified, legally entitled and competent to execute the contract.
- v. Best value does not necessarily mean the lowest initial price option, but rather represents the best return on investment, taking into consideration: the unique and specific circumstances of each procurement activity; the balance of time, cost and quality required; and the successful overall outcome of the contract in meeting its original objectives.

241. Good Governance and Accountability Policies. IFAD Procurement Guidelines and Anti-Corruption Policy, will be adapted to this Project through the Financing Agreement, require zero tolerance to corrupt and fraudulent practices. Therefore, the procurement process also requires a strict adherence to Sindh PPRA/PPRA and IFAD Guidelines and Policy.

242. Prohibited Practices. The Borrower (including the all-implementation parties, and oversight agencies), as well as bidders, potential bidders, suppliers, contractors and consultants financed through the proceeds of this project, shall observe the highest standard of ethics during the selection and execution of such contracts.

243. Pursuant to this policy, the following provisions shall be applied throughout the project implementation:

- i. The Borrower and IFAD will reject a proposal for award if it determines that the bidder or consultant recommended for award, or any of its personnel. Or its agents, or its sub-consultants, subcontractors, service providers, suppliers and/or their employees has directly or indirectly engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;
- ii. IFAD will declare mis-procurement and cancel the portion of the loan allocated to the contract if it determines at any time that representatives of the borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, coercive, collusive or obstructive practices during the procurement or implementation of the contract in question without the borrower having taken timely and appropriate action satisfactory to the DP to address such practices when they occur, including failing to inform the DP in a timely manner at the time they knew of the practices.
- iii. IFAD will declare a consultant or firm ineligible, either indefinitely or for a stated period of time, to be awarded a future IFAD financed contract if it at any time determines that the bidder, supplier, contractor, service provider or consultant has engaged in corrupt, fraudulent, coercive, collusive or obstructive practices in competing for, or in executing, an IFAD-financed contract; and
- iv. All contracts financed out of the proceeds of SCRCP will have a provision requiring supplier, contractor or consultants to permit both the Borrower and IFAD to jointly or separately inspect their accounts and records relating to the performance of the contract and to have them audited by auditors appointed by the Borrower and/or IFAD.
- v. All staff involved in the procurement process has a duty to report to the Project Director and IFAD (i.e. through its Country Director/ Country Program Manager) for any suspected instances of fraud, corruption and collusive or coercive practices when identified.
- vi. In the case of collusive behavior, if the evidence suggests that all or some of the bidders or consultants are involved, the evidence should be jointly reviewed by the Project Director and the representative of P&D Board, GoS, and if necessary, the procurement process is cancelled, and all of the involved firms or individuals are sanctioned which could be up to the debarment. If the procurement is still in process, then the procurement must be cancelled and reinitiated only after the matters have been addressed properly.

244. Conflicts-of-Interest. A firm/entity/individual participating in a procurement process under the SCRCP shall not have a conflict-of-interest. Any firm/entity/individuals found to have a conflict-of-interest shall be ineligible for award of a contract.

245. A conflict-of-interest is a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations, and that such conflict of interest is not acceptable under the SCRCP. The Borrower will take appropriate actions to manage such conflicts-of-interest which may include

rejecting a proposal for award if it determines that a conflicts-of-interest has flawed the integrity of any procurement process. A firm shall be considered to have a conflicts-of-interest in a procurement process if:

- (a) such firm is providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of a project that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm.; or
- (b) such firm submits more than one bid, either individually or as a joint venture partner in another bid, except for permitted alternative bids. This will result in the disqualification of all bids in which the Bidder is involved; or
- (c) such firm (including its personnel) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved acceptable to IFAD throughout the procurement process and execution of the contract; or
- (d) such firm does not comply with any other conflicts-of-interest situation as specified in the Bidding Documents relevant to the specific procurement process.

246. It is the duty of all project staff and any other public employee directly or indirectly involved with the procurement process and particularly the preparation of bidding documents, bid evaluation, contract negotiations, contract management and payments to avoid any potential conflicts-of-interest. A conflicts-of-interest arises when the individual has a direct or indirect relationship with a bidder, consultant, contractor, service provider or supplier.

- a. In the event that a project staff or a member of the procurement committee or an employee who is directly involved with the procurement process feels that there is the potential for a conflicts-of-interest they shall declare it to the procurement committee and remove themselves from the procurement process.
- b. Audit Arrangements. The audits (both internal and external) under this Project will be performed by the Auditor General of Pakistan or separate audit firms, which will be hired by PMU. In addition, IFAD will conduct its regular annual supervisions to review the implementation progress, including reviewing the procurement aspect. Accordingly, it is important that PMU maintains contract registers as well as the documentation pertaining to procurement in the project files.
- c. Standard-of-Business Ethics. All project staff and consultants involved in procurement activities covered by this Manual shall observe the Code-of-Business Ethics as outlined below:
 - i. No individual shall use his/her authority or office for personal gain. Personal gain includes accepting or requesting anything of material value from bidders, prospective bidders or suppliers for the individual, his or her spouse, parents, children or other close relatives, or for other persons from whom the individual might gain direct or indirect benefit of the gift.
 - ii. An individual shall seek to maintain and enhance the reputation of the Government by:
 - iii. Maintaining the highest standards of honesty and integrity in all relationships both inside and outside the Entity in which he works;
 - iv. Developing the highest standards of professional competence; and

- v. Using funds and other resources for which he/she is responsible to provide the maximum benefit to the Government
- d. Declare Conflict-of-Interest. An individual shall declare any personal interest that may affect or might reasonably be deemed by others to affect impartiality in any matter relevant to their duties.
- e. Disclosure of personal relationships. an individual shall declare any relationship with a bidder, supplier, contractor, service provider or consultant and shall take no part in either the decision-making process or the implementation of any contract where such a relationship exists. A personal relationship is defined as consanguinity or affinity up to the third civil degree.
- f. Confidentiality and Accuracy of Information. An individual shall respect the confidentiality of information gained in the course of duty and shall not use such information for personal gain or for the unfair benefit of any bidder, supplier, contractor, or consultant.
- g. Information given by an individual in the course of their duty shall be true, fair and not designed to mislead.
- h. Competition. All bidders, suppliers, contractors, and consultants shall be treated with fairness and impartiality and avoid any business arrangement that might prevent the effective operation of fair competition.
- i. Business Gifts. No business gifts will be accepted from current or potential Government suppliers unless such gifts are of very small intrinsic value (normally below USD 100 equivalent).
- j. Hospitality. An individual shall avoid any business hospitality would be viewed by others as having an influence in making a government business decision as a result of accepting that hospitality.
- k. Reporting. All individuals have a moral and ethical responsibility to report any unethical conduct by a colleague, a bidder or a supplier to their superiors, oversight agencies, IFAD or to the auditors.
- l. Examples of Unethical Conduct. The following are examples of the type of conduct prohibited by this Code of Ethics:
 - (a) Revealing confidential or “inside information” either directly or indirectly to any bidder or prospective bidder;
 - (b) Discussing a procurement with any bidder or prospective bidder outside the official rules and procedures for conducting procurements;
 - (c) Favouring or discriminating against any bidder, prospective bidder or consultant in the Preparing of technical specifications, terms of reference or standards or the evaluation of bids and proposals;
 - (d) Destroying, damaging, hiding, removing, or improperly changing any formal procurement document;
 - (e) Accepting or requesting money, travel, meals, entertainment, gifts, favours, discounts or anything of material value from bidders or prospective bidders, suppliers, contractors or consultants;
 - (f) Discussing or accepting future employment with a bidder or prospective bidder, suppliers, contractors or consultants;
 - (g) Requesting any other person to violate the public procurement rules or procedures;

- (h) Ignoring evidence that the Code of Ethics has been violated; and
 - (i) Ignoring illegal or unethical activity by bidders or prospective bidders, suppliers, contractors, service providers or consultants, including any offer of personal inducements or rewards or otherwise.
- m. Mis-procurement. Any procurement of goods, works or services that is at variance with the provisions of the Sindh-PPRA/PPRA Regulations, and IFAD Procurement Handbook and Guidelines, will be construed as mis-procurement. Proceeds of the IFAD financing will not be used to finance such procurement. In such cases, IFAD may, in addition, take other remedial action under the financing agreement, including cancellation of the amount in question from the loan and/or grant account by declaring it ineligible. Even if the contract was awarded following IFAD's "No Objection" statement, the Fund may still declare misprocurement if it concludes that this statement was issued on the basis of incomplete, inaccurate or misleading information furnished by the borrower/recipient, or that the terms and conditions of the contract had been modified without IFAD's approval.
- n. Fraud and Corruption. It is government's policy to require that procuring entities (including any beneficiaries of the funds), as well as bidders, suppliers, and contractors and their agents (whether declared or not), personnel, subcontractors, sub-consultants, service providers and suppliers under government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. in pursuance of this policy, government:
- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;
 - (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (v) "Obstructive Practices" mean: deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede an IFAD investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or acts intended to materially impede the exercise of the IFAD's inspection and audit rights.
 - (b) will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;
 - (c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Government or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the Government having taken timely and

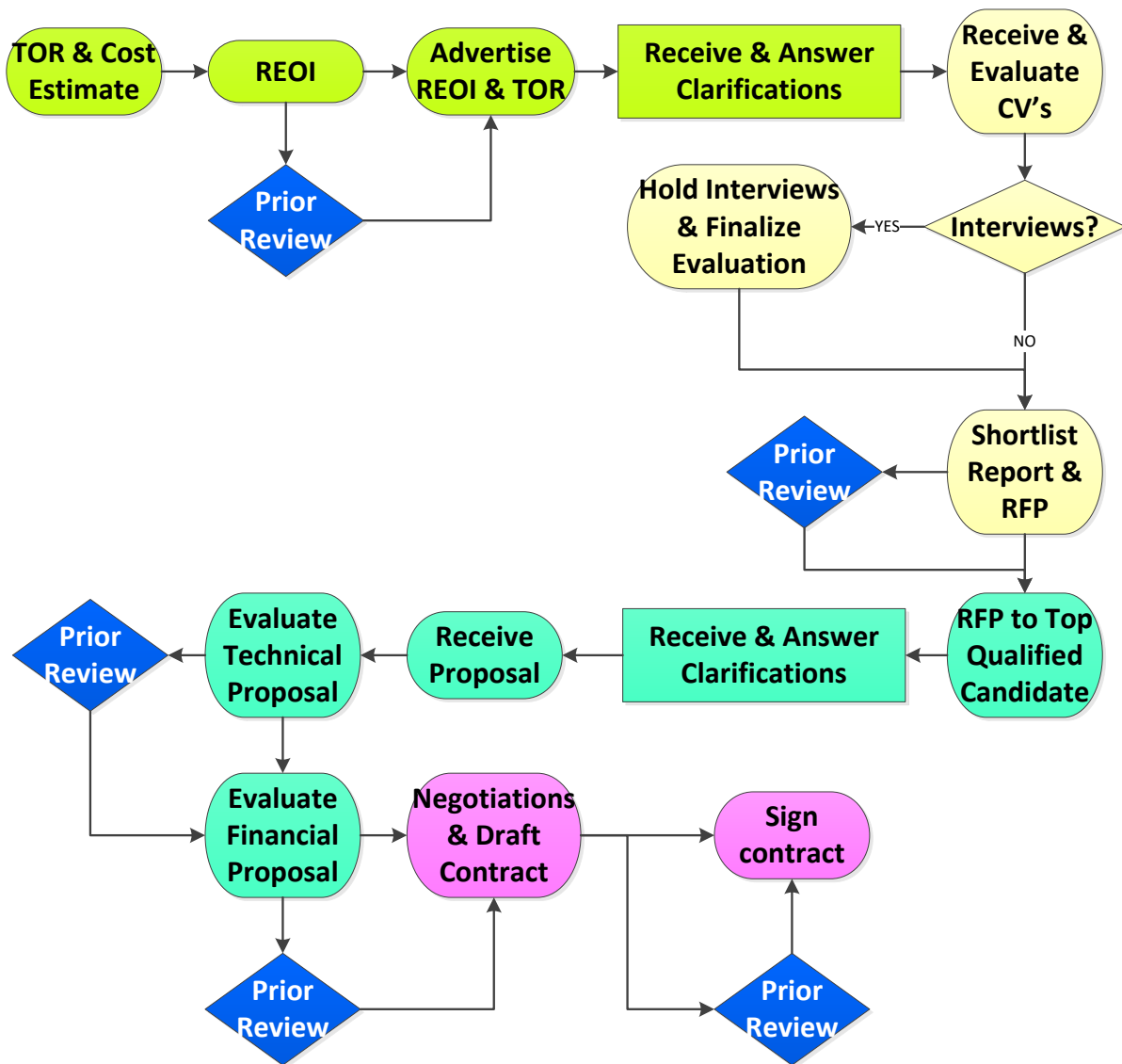
- appropriate action satisfactory to IFAD to address such practices when they occur;
and
- (d) will sanction a firm or an individual, at any time, in accordance with prevailing IFAD's sanctions procedures, including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a IFAD-financed contract; and (ii) to be a nominated subcontractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a IFAD-financed contract;
 - o. In further pursuance of this policy, Bidders shall permit the IFAD to inspect any accounts and records and other documents relating to the Bid submission and contract performance, and to have them audited by auditors appointed by the IFAD.
 - p. Dispute Resolution. Where there is a dispute between the SCRP and a bidder or contractor, the process for dealing with this dispute will be as outlined in the bidding documents, contract and/or national legislation, as applicable. In these circumstances IFAD will not be appointed as an arbitrator or be asked to appoint an arbitrator.
 - q. IFAD Monitoring and Review. To ensure that the procurement processes are carried out in conformity with Sindh-PPRA/PPRA and IFAD Procurement Guidelines and with the agreed procurement plan, IFAD will review arrangements for procurement of goods, works and services proposed by the PMU including:
 - a. Contract packaging;
 - b. Applicable procedures and procurement methods;
 - c. Bidding documentation;
 - d. Composition of bid evaluation committees;
 - e. Bid evaluations and award recommendations; and
 - f. Draft contracts and contract amendments
 - g. The extent to which these review procedures will be applied to the Project is contained in the letter to the Borrower/Recipient.
 - r. Legal Framework. The procurement of goods, works and services by SCRP follows Sindh-PPRA Rules and Regulations as well as the modalities set out in the Letter to the Borrower and this PIM and specified each year in the procurement plans for each individual procurement. The below table summarizes the procurement modalities and prior review thresholds applicable to the project.

Table 5: procurement methods allowed for SCRP

GOODS & WORKS	SERVICES (FIRMS AND INDIVIDUALS)
International Competitive Bidding (ICB)	Quality and Cost Based Selection (QCBS)
National Competitive Bidding (NCB)	Fixed Budget Selection (FBS)
International Shopping (IS)	Least Cost Selection (LCS)
National Shopping (NS)	Selection based on Consultants' Qualification (CQQ)
Direct Contracting or Direct Procurement	Selection of Farmer Organizations (SFO)
Procurement from UN/ GoP Agencies	Selection of individual consultants (ICS)
Procurement with community participation/farmers organizations/ 4Ps	Single-source selection (SSS)

- s. Types of Goods, Works and Services. It is anticipated that the following goods, works and services will be procured for SCRP:
- Goods – Vehicles, motorcycles, office and IT equipment, software, furniture, generators, supplies, etc.
 - Works – rural roads, on-farm Irrigation infrastructure, ponds, household latrines, household solarization, fish landing sites infrastructure, aquaculture ponds
 - Services - Audits, Studies and Surveys, Consultancies (from specialized consulting firms or individuals), Seminars and Workshops, Technical Assistance, Training and other services.
- t. Distribution of Roles: Except for community based small interventions assigned to IPs, the PMU is responsible for carrying out the Project's procurement process. As a procuring entity for SCRP, the PMU has established a procurement unit in charge of, inter alia, procurement planning, handling of the bidding process, conducting bid openings and evaluations of bids, and procurement/contract monitoring.
- u. IFAD-Funded PMU/DCUs Staff Selection: The procedure to recruit IFAD-funded staff to join the Project Management Unit/District Coordination Units will be the Individual Consultant Selection procedure (ICS) described in IFAD Procurement Handbook. This does not apply to staff seconded by government. The selection of PMU/DCUs staff or changes to staff shall be coordinated in advance with IFAD. All professional staff selection shall be subject to the No Objection by IFAD. The PMU shall estimate the cost covering the remuneration for the full remaining duration of the project as per the Financing Agreement and Letter to the Borrower. All staff recruitment shall feature in the relevant Procurement Plan.
- v. The selection process shall follow the ICS procedure with the following highlights adapted for the particular case of selecting PMU/DCUs staff:
- Preparation of ToR using IFAD SPD Template – ToR;
 - Preparation of REOI using IFAD SPD Template – Request for Expressions of Interest (REOI) Advertisement;
 - If interviews with the shortlisted applicants are foreseen to help identify the most qualified applicant,
 - o the interview as well as the related criteria should be explicitly specified in the REOI and ToR; this means that the interview requirement must be known in advance and announced to the public as well;

- the interview competencies required should be assigned a weight in addition to the weights for other qualification criteria;
 - competency criteria should be formulated in a clear and objective manner;
 - interviews should be based on the same set of competency questions used with all candidates;
 - all applicants passing the minimum score (for CV evaluation) shall be invited for interview;
 - interviewees should be given sufficient time in advance;
 - interviews should be held online in case of obstacles to physical meeting are present;
 - In addition to competency questions, PMU may test interviewees to validate their knowledge and experience through one or more “technical questions” which also shall be standardized and common to all interviewees;
 - PMU shall consult with IFAD in advance for setting up the competency-based interview questions as well as the technical questions for each position; apart from such a consultation, the questions shall remain strictly confidential;
 - the interviews shall be fully documented as well as the resulting scoring within the evaluation report;
 - for the recruitment of long-term PMU/RCUs staff funded by IFAD, competency-based interviews [shall consistently be required OR are recommended];
 - The flowchart below depicts the main steps in the ICS procedure.
- w. In exceptional and duly justified cases identified in the Handbook, Individual Consultants may be selected on a sole-source basis:
- tasks that are a continuation of previous work that the consultant has done and for which the consultant was competitively selected;
 - certain assignments expected to last less than three months;
 - emergencies arising from natural disasters;
 - when the individual is the only consultant qualified for the assignment; and
 - when the individual consultant assignment budget is below the predefined low value threshold for SSS.
- x. In such cases, the PMU will launch a SSS through NOTUS including detailed justifications.
- y. Recruitment of Civil Servants is subject to IFAD’s Policies. Whenever Operational Policy and Results Division (OPR) issues a new update, the PIM will need to be updated accordingly.



Flowchart procedure for selection of IFAD-funded Project Staff

114.Roles & Responsibilities. The below table clarify the roles and responsibilities of all stakeholders especially those entrusted with one or more functions of the procurement cycle.

Table6 : responsibility of task with different steps in the procurement process at PMU level

Tasks	Responsible staff/unit
Procurement planning	Procurement Team/Procurement Specialist & Contract Management Officer
Preparation of advertisements	Procurement Team/Procurement Specialist & Contract Management Officer
Review of advertisements	Manager Finance and Administration
Approval of advertisements	Project Director
Preparation of bidding documents	Procurement Team/Procurement Specialist & Contract Management Officer
Review of bidding documents	Manager Finance & Administration/relevant Sector Specialist
Approval of bidding documents	Project Director
	IFAD (No Objection)
Bid opening	PMU bid opening committee
Bid opening minutes and attendance sheet	Procurement Team/Procurement Specialist & Contract Management Officer
Rejection, cancellation, extension of bids	Project Director
	IFAD (No Objection)
Bid evaluation	PMU bid evaluation committee
Preparation of evaluation report	Procurement Specialist (as secretary of the evaluation committee)
Approval of evaluation report	Project Director
	IFAD (No Objection)
Contract's award (based on approved evaluation report)	Project Director
Signature of contracts	Project Director
Contract monitoring	Contract Management Officer
Record Keeping/Filing	Procurement Team/Procurement Specialist & Contract Management Officer

247. The PMU is allowed to conduct procurement for goods, works and non-consulting services when the value is below USD 1,000. The Contract Management Officer will prepare the requests for quotations, under the supervision of the Procurement Specialist. A small evaluation committee is set up to evaluate quotations received from bidders. The PS prepares the evaluation reports (as secretary of the evaluation committee), which are approved by the PD, who delegates his/her powers to the purchase committee for the award and signature of the purchase orders. With regard to implementing partners, PMU representation will be at all stages of procurement, from planning, advertisement, short-listing to Purchase Order/Award of the Contract. In addition to ensuring adherence to applicable procurement rules, the Procurement Specialist and Project Director are responsible for reporting procurement activities and submitting related data to IFAD and the P&D Board Government of Sindh.

248. IFAD plays an important role in the support, monitoring and control of the Project's procurement. IFAD's No Objection must consequently be obtained at certain stages of the procurement process, on the basis of prior review thresholds specified in the LTB. In the case of a query or rejection of a No Objection/approval request by IFAD or by the Project Director, the procurement unit is required to (i) suspend the procurement process, (ii) address the issue raised (by answering the query or correcting the faulty documents), (iii) re-submit the request and obtain the No Objection/approval and (iv) resume the procurement process. The above table summarizes the responsibilities of each of the parties involved in the procurement of goods, works and services for SCRP.

J. Procurement Monitoring System

249. The PMU uses a database system developed on Excel to monitor the project procurement actions and status on a continuous basis for each individual procurement case. This Procurement Tracking System (PTS), which includes the procurement plan, also records the following data (in addition to planned amounts):

- a. Requisition date and number (sequential number generated automatically to identify each procurement case) and name of requesting staff
- b. Component, sub-component Annual Work Plan and Budget (AWPB) activity, expense category, district and financier
- c. Full description of goods, works or services and estimated cost
- d. Shortlists (names and country of suppliers)
- e. Date of issuance and number of bidding documents (ITB, RFP, RFQ, etc.) or date of IFAD's No Objection in the case of a waiver of competitive bidding
- f. Date of evaluation and name of selected supplier
- g. Date of IFAD's No Objection for contract award
- h. PO or contract amount, date and number (and subsequent amendments, if any)
- i. Amount of advance paid, if any
- j. Date of delivery and Receiving and Inspection Report date and number
- k. Invoice amount, number and receipt date
- l. Payment date(s).
- m. Any relevant comments may also be included in a special column.

250. This system also allows procurement data to be sorted by project component/subcomponent, by expense category, by contract number or date, by country of origin of the selected suppliers, by financier, by district, etc. Reports and statistics can then be issued according to any of those criteria and for any period requested. The Procurement Specialist is required to input each procurement action into the PTS on a real time basis. The information inserted into the database enables to generate monitoring reports for the PMU, P&D Board-GoS, and IFAD as needed.

K. Procurement Cycle

251. Procurement includes the planning, purchasing, delivery and final hand-over of goods, works and services. The procurement cycle includes the following steps:

- a. Procurement planning
- b. Requisitioning
- c. Identification of suppliers by advertising and short-listing (where applicable)
- d. Competition process (via ITB, RFP, RFQ, Quotation etc., or waiver of competition in exceptional circumstances)
- e. Selection of supplier (following an evaluation process)
- f. Award of contract (including the issuance of the purchase order or contract)
- g. Contract administration and monitoring
- h. Delivery of goods, works or services

i. Reporting.

252. The procurement cycle is described in detail in the following sections. Throughout this cycle, the Procurement Team and Project Director are responsible for ensuring that the Rules and Procedures of the GoS and IFAD (where applicable) are fully complied with, in conformity with the project basic documents and the Sindh-PPRA Rules.

253. Procurement Planning¹⁶. As soon as possible after project commencement, the Project team shall prepare a Procurement Plan, using IFAD's template. The Procurement Plan shall be prepared annually and shall be fully aligned with AWP&B, and submitted to IFAD for No Objection. No procurement activity shall start unless it is present in a PP that received a No Objection. The PP shall be updated with actual dates/figures and shall be upgraded for any changes in the procurement methods, addition of activities, elimination of others, increases in the budget, etc. Any upgrade to the PP shall also be submitted for No Objection. Procurement activities and their respective methods and timelines shall be strictly adhered to. All procurement plans and their updates or modifications shall be subject to the IFAD's Prior Review and No Objection before implementation. When preparing the procurement plan, an accurate and realistic planning and prioritization of needs is an essential prerequisite to effective procurement and a key tool for monitoring project implementation. The plan will be agreed between the borrower and the IFAD during negotiations. The procurement plan will be updated annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. Items procured outside the procurement plan and the related AWPB will be declared mis-procurement and the related expenditure will be deemed ineligible. For each individual procurement item, the PP shows separate planned vs. actual dates lines and contains the following information:

- a) Project component and AWPB activity code
- b) Expense category
- c) Procurement case number (from the PTS)
- d) Nature of procurement, description and quantity of goods/works/services
- e) Procurement method and IFAD review requirement
- f) Pre-qualification or post-qualification requirement (for goods, works or non-consulting services)
- g) Estimated cost, including transport and insurance, if applicable
- h) Planned dates for the entire procurement process, i.e. expression of interest or pre-qualification (if applicable), bidding document preparation, publication, bid opening, bid evaluation, post-qualification (if applicable), contract signature, including IFAD No Objection (for each step where applicable)

L. Planned Completion or Delivery Date

254. Once it is completed, the procurement plan is submitted to the Finance and the PD by the end of April each year for review. While reviewing the procurement plan, the Finance and PD must ensure that (i) the information contained in the plan adequately reflect the AWPB, (ii) the cost estimates are reasonable, (iii) funds are available to conduct the procurement actions and (iv) the anticipated procurement methods are in conformity with the provisions of the national rules and the Letter to the Borrower. The Procurement Specialist makes corrections to the procurement plan as requested by the Finance Unit and PD. Once the plan is validated, the Procurement Specialist makes a proposal for grouping goods, works and services to be procured into sizeable bid packages so as to permit the

¹⁶ https://www.ifad.org/documents/38711624/39421018/proc_handbook_e.pdf/2feb53a-4244-4447-a788-d06a632fd3b5

optimal use of competitive bidding. The finalized procurement plan is an integral part of the AWPB. It is therefore submitted to the PSC for approval with the AWP&B, by Mid-May. After approval by the PSC, the procurement plan and the proposal for grouping are forwarded to IFAD for review and possible No Objection by last week of May. Observations from IFAD are discussed among the Project Director, team and the Procurement Specialist will integrate in the plan. In the absence of a reply from within 30 days of sending it, the procurement plan is deemed approved by IFAD. It is then shared with the relevant PMU/Components Specialist staff.

255. Every time a step is completed in the procurement process, the Procurement Specialist updates the procurement plan by inserting in the corresponding column, the actual date on which the step was completed. The PP is updated every time there is a revision of the AWPB (usually at half-year); the PP is then reviewed by the team and PD and re-submitted together with the AWPB – to the approval of the Project Steering Committee (PSC), as well as to IFAD for No Objection.

256. Purchase Requisition. The purchase requisition is the document that initiates the procurement action. It is prepared by the requesting staff contains the following information:

- a. AWPB activity code
- b. Description of goods, works or services requested
- c. Cost estimate (including transport¹⁷, insurance and incidental costs)
- d. Date of required delivery
- e. Justification for waiver of competitive bidding, if applicable.
- f. Technical specifications/TOR must be attached to the requisition.

257. The requisition is signed by the requesting staff and forwarded to the Financial Management Specialist who indicates the expense category and account numbers and verifies that:

- a. The procurement request is included in the procurement plan; if not, s/he asks the requesting staff for justification and notes it on the requisition.
- b. Funds are available under the component/AWPB activity and expense category; s/he prints out a budget statement and attaches it to the requisition.
- c. The Financial Management Specialist (FMS) consults with the Procurement Specialist as needed to ensure that the requisition is complete and the information adequate.

258. After verification by the FMS, the requisition goes to the Project Director who ensures that:

- a. Proposed items are in accordance with the approved procurement plan; if not, s/he ensures that the justification provided by the requesting staff is acceptable¹⁸.
- b. Estimated cost is reasonable and within the budget for the current year.
- c. Proposed goods, works or services are technically appropriate.
- d. Potential bidders have been identified.
- e. Information on the form complies with procurement rules, policies and procedures adopted for the Project.
- f. If funds are not available, the Project Director decides whether to postpone the procurement or to reallocate the budget and informs the requesting staff and FMS accordingly. Once approved the requisition the requester shall submit it to procurement unit. The Procurement

¹⁷ For purposes of estimating the cost on the requisition, airfreight is assumed to represent 30% and ocean freight 15% of the cost of goods.

¹⁸ If the purchase is authorized, the Procurement Specialist will amend the procurement plan as part of the next update

Specialist determines the appropriate method for the procurement of goods, works or services on the basis of threshold and input in PTS.

259. Upon receiving an approved purchase requisition, the Procurement Specialist must:

- a. Input the information on the requisition into the PTS
- b. Note the system-generated sequential number on the requisition, and
- c. Create a procurement file.

260. The Procurement Specialist then updates the procurement plan by entering the file number. All documents related to a particular procurement case are kept in the same file. In order to facilitate filing and search, the same number, preceded by the appropriate prefix (e.g. ITB, RFP, RFQ, PO, etc.) will be used to identify the competition document and corresponding contract.

261. Technical Specifications and Terms of Reference (ToR). The technical specifications (for goods and works) or terms of reference (for services) attached to the purchase requisition are normally prepared by the requesting staff (under supervision by the component head) and checked by the Procurement Specialist for quality and suitability. However, assistance from specialized technical experts may be needed to develop complex specifications (including specific packaging/shipping requirements) or terms of reference.

262. Technical Specifications. Specifications are based on relevant technical characteristics and/or performance requirements. The specifications must clearly and fully describe the goods or works required, as accurately as possible and in generic terms. The use of brand names, catalogue numbers or similar classifications that could favor a particular supplier must be avoided. Where there is no choice but to use a brand name or catalogue number of a particular manufacturer in order to clarify an otherwise incomplete specification, then it shall be complemented with the words “or equivalent”. The specifications must be drafted to allow the evaluation of offers for goods or works which have similar characteristics and which provide performance at least substantially equivalent to those specified.

263. There are three types of specifications, which may be combined:

- a. Functional specifications. Define the function or duty to be performed and focus on what the product is to do. Less emphasis is given to materials or dimensions.
- b. Performance specifications. Define the performance and results required of the product.
- c. In order to assure quality of the goods/works, relevant product standards (international or national) and environmental standards (energy star ratings, recyclable materials, etc.) should be included. Where certain standard specifications are referred to, a statement should follow that other international or national standards that promise to confer equal or better quality will also be acceptable.
- d. Design requirements specifications. The exact dimensions, materials or characteristics must be provided. It should be noted that this type of approach might exclude certain suppliers (and hence, lessen competition) because of differences in engineering practices.
- e. Dimensions should always be quoted using the metric system.

264. Standards and technical specifications quoted in bidding documents should promote the broadest possible competition, while assuring the critical performance or other requirements for the goods or works under procurement. As much as possible, the requesting staff should try to specify internationally accepted standards such as those issued by the International Standards Organization (ISO) with which the equipment or materials or workmanship shall comply. Where such international standards are unavailable or are inappropriate, national standards specified by Pakistan Standards Quality and Control Authority may be specified. In all cases, the bidding or proposal documents shall

state that equipment, material, or workmanship meeting other standards, which promise at least substantial equivalence, will also be accepted.

265. Terms of References (ToRs). are normally used for the services contracts. They detail the objective, scope and nature of the assignment, and form an integral part of the contract. The following information must be included in the ToRs:

- a. The background of the Project, including objectives and main components/activities;
- b. A description of the required services. The activities to be performed or services to be rendered must be described in detail: for example, modalities of a survey (defining area, data needed, means to be employed); organization of a training course (defining target group, curriculum outline, training materials, course duration);
- c. A comprehensive list of the tasks and standards to comply with;
- d. Coordination arrangements (including the list of documents and/or services to be provided by the PMU or the end-user in order to facilitate the execution of the assignment);
- e. Modalities for monitoring and control of progress by the PMU;
- f. A detailed work schedule, i.e. duration of activities/services from inception to completion, indicating any factors influencing that timeframe, such as seasonal considerations, schedule for initial submission, review/approval time, etc.;
- g. A clear definition of expected outputs/results and the final products to be submitted (e.g. survey completed, maps drawn, research undertaken, data collected/elaborated, workshop conducted), and

266. Reporting requirements (for example, specification of format and content for interim and final reports, periodicity and deadlines, number of copies, recipients, etc.).

267. Identification and Shortlisting of Suppliers. The identification and shortlisting of suppliers for the SCRP procurement is normally carried out by means of a competitive process, in compliance with the national procurement rules. This competitive process may be more or less open depending on the provisions of the Sindh-PPRA Rules and the IFAD LTB.

268. The table below summarizes the procurement modalities and the IFAD review requirements for the various categories of procurement and related thresholds:

Table 7: Threshold for Procurement of Goods, Works and Services

Procurement and Review Methods Expenditure Category	Contract Value (US\$)	Procurement/ Selection Method	Contracts Subject to Prior Review/ Post Review
Works	≥ 1,000,000	ICB	Prior Review
	≥ 10,000 < 1,000,000	NCB	Prior Review
	< 10,000	NS	Post Review
	All Values	DC	Prior Review
Goods	≥ 500,000	ICB	Prior Review
	≥ 10,000 < 500,000	NCB	Prior Review
	≥ 1,000 < 10,000	NS	Post Review
	All Values	DC	Prior Review
Consulting Services (Firm)	≥ 100,000	QCBS/QBS (International)	Prior Review
	≥ 10,000 < 100,000	QCBS/QBS/FBS/LCS	Prior Review

	< 10,000	CQS	Post Review
	All Values	SSS	Prior Review
Consulting Services (Individual)	≥ 100,000	ICS (International)	Prior Review
	< 100,000	ICS (National)	Prior Review
	All Values	SSS (ICS)	Prior Review

Where:

ICB.	International Competitive Bidding	NCB.	National Competitive Bidding
QCBS.	Quality and Cost Based Selection	CQS.	Selection Based on Consultants' Qualification
FBS.	Fixed Budget Selection	LCS.	Least Cost Selection
SSS.	Single Source Selection	DC.	Direct Contracting
ICS.	Individual Consultant Selection		

269. Open Competitive Bidding – ICB or NCB (Goods & Works). As indicated in the table above, open competitive bidding may be done at the national or international level, depending on the value of the procurement. International bidding is appropriate for high value or complex procurement and where the goods, works or services by their nature or scope, are more likely to be of interest to international suppliers. National competitive bidding is the procedure normally used for public procurement in Pakistan; it is most appropriate for goods or works of smaller value, which are not likely to attract adequate foreign competition. In both cases, the selection of the supplier is carried out on the basis of an invitation to bid, using national standard bidding documents. Procurement of goods and works on open competitive bidding is subject to validation from the Project Director. IFAD prior review is required for goods and works valued at USD 20,000 or more. Both ICB and NCB procurement is conducted exclusively by the PMU.

270. Pre-qualification. For high value and/or complex procurement of goods, works or non-consulting services, the PMU may decide at planning stage to go through a prequalification process in order to;

- a. identify potential bidders that have the required capacity, resources and experience for the contract. This procedure, which limits the actual bidding process to a limited number of qualified suppliers/contractors, is particularly useful when:
- b. Bidders may be discouraged by the high cost of preparing bids and would be more willing to invest resources in bid preparation knowing that they are competing against a limited number of bidders,
- c. Evaluating a high number of bids would be very costly and time-consuming for the PMU and/or
- d. Contractor's qualifications are key for the satisfactory performance of the contract.

271. The Procurement Specialist prepares the pre-qualification documents using the IFAD standard templates, including a short description of the Project, a description of the goods, works or non-consulting services, the pre-qualification criteria and the details for submission of applications (name/address, deadline, submission modality, and information/documentation required to verify the applicant's eligibility or qualifications). The Procurement Specialist then drafts the pre-qualification invitation, which is published in the Sindh-PPRA and SCRIP websites, and in at least 2 daily newspapers (Urdu and in English) based on the required Sindh-PPRA thresholds. Sufficient copies of the pre-qualification documents must be ready for sale at the PMU (by the Procurement Specialist) on the first day of publication of the notice. The price charged must only reflect the actual cost of production of the pre-qualification documents. The Procurement Specialist records in a dedicated register, the name and address of all applicants who purchase a prequalification document.

272. On the submission deadline, the Evaluation Committee augmented with the relevant technical expert or consultant, meets to evaluate the applications received against the criteria defined in the pre-qualification document and to attribute a score to each application. The evaluation report prepared by the Procurement Specialist (as secretary of the committee) identifies the applicants that are qualified, and those that are not qualified, and states the reasons. The pre-qualification report is signed by all committee members, approved by the PD and sent to IFAD for No Objection along with the bidding documents.

273. Invitation to Bid. The Procurement Specialist prepares the ITB using the IFAD Standard Bidding Documents. The ITB package must contain the following elements:

- a. ITB letter and Instructions to bidders (clearly outlining the required validity of bids as well as the criteria for bid evaluation and selection of the lowest evaluated bid);
- b. Information on the deadline and location for bid submission, and public bid opening;
- c. Bid submission sheet, including sample formats for bid security, if applicable;
- d. Model contract or PO, including general and special terms and conditions;
- e. Detailed list of goods or description of works (including norms, standards and/or methods to comply with);
- f. Technical specifications, list of goods, bill of quantities and/or drawings (provided by the requesting staff);
- g. Place and time of delivery or completion schedule; insurance requirements;
- h. Description of penalties or bonuses;
- i. Anticorruption compliance statement and/or permission for IFAD to inspect bidders' accounts/records relating to the bid submission and contract performance, and to have them audited by IFAD-appointed auditors;
- j. Guidance on complaint filing procedures;
- k. Financial provisions (payment modalities, advances, bank guarantees, etc.).

274. The Procurement Specialist used IFAD standard document for bid advertisement, which contains the following:

- a. The bid number;
- b. A brief presentation of the Project and the funding source (refer to IFAD Procurement Guidelines/SBD for the appropriate text to use);
- c. A description of goods/works to be procured, and name of the contracting authority;
- d. The preference given to goods/works manufactured in Pakistan or in developing countries, as well as the eligibility criteria for this preference;
- e. The method and criteria to be used for the evaluation and comparison of bids;
- f. The place, contact name and modalities for retrieving the ITB package;
- g. The name of the person to contact for queries;
- h. The place and deadline for submission (date and time);
- i. The place, date and time for the bid opening.

275. The ITB and advertisement are reviewed by the project technical/sector specialist for validation, and approved/signed by the PD. When required, IFAD's No Objection on the bidding documents must also be obtained prior to publishing the advertisement (the Procurement Specialist

must enter the date of the IFAD No Objection in the PTS). The Contract Management Officer (under supervision of the Procurement Specialist) is responsible for organizing and monitoring the advertising process. PS is in charge of the distribution of ITB packages to prospective bidders. Sufficient copies of the bidding documents must be ready for sale at the PMU by the first day of publication of the ITB. The price charged must only reflect the actual cost of production of the bidding documents. Prospective bidders are allowed to briefly inspect the bidding documents prior to purchasing them. For each ITB package purchased, the Procurement Specialist (i) delivers a receipt to the bidder, (ii) records the name and address of the bidder in a register, (iii) obtains the bidder's signature on the declaration of ethical conduct and (iv) obtains written acknowledgement from the bidder that samples have been inspected (if the bid is subject to conformity with samples).

276. The Contracts Management Officer (CMO) acts as petty cash custodian for the cash received from the sale of bids. The cash is kept in a petty cash box and locked in a safe. It is used to pay for expenses related to the preparation of bids, the bid opening ceremony and the bid evaluation meetings. The Contract Management Officer keeps a petty cash register to account for these monies, under the supervision of the FMS. There are no major procedural differences between ICB and NCB apart from the language, advertising media used and length of publication. International bids must be advertised (in English) in international newspapers, specialized websites¹⁹ and through local representatives of member countries whose firms may potentially be interested. In addition, a longer time must be allowed before bid closing to reflect the slower communications involved. National bids, on the other hand, are advertised in the Sindh-PPRA and SCRPP websites or bulletin boards, and in at least 2 daily newspapers (one in Urdu and one in English) according to Sindh-PPRA Rules and thresholds.

277. National Shopping (NS) (Goods USD >1,000 to ≤ 20,000; Works ≤ USD 20,000). When using the national shopping procedure, the competition is limited only to pre-identified suppliers who are known to be qualified to furnish the goods, works or services required. This is the preferred procurement method for readily available off-the-shelf goods, standard specification commodities, simple civil works of small value and standard, low value non-consulting services. National shopping may be carried out at PMU level for small value contracts (under USD 1,000), as agreed by the Procurement Specialist and authorized by the PD, and under the supervision of the Procurement Specialist.

278. Identification of Suppliers and Shortlisting. In order to facilitate the procurement process when national shopping is used, the PS with support of CMO develops and maintains a roster of suppliers sorted by industry and area of expertise (i.e. types of goods, works and services proposed). This database is maintained and updated by the PS with assistance from the CMO; it must contain the following data for each potential supplier:

- a. Name of company
- b. Details of supplier (address, telephone, fax, email, website, etc. - the country should be input in a separate field for reporting purposes)
- c. Industry or area of expertise
- d. References (other projects or SCRPP partners which have contracted the supplier in the past)
- e. Remarks (e.g. evaluation of supplier's performance).
- f. Many sources are available to the SCRPP in order to identify potential suppliers, including:
- g. IFAD headquarters and the IFAD Asia network
- h. The GoP, GoS and affiliated institutions

¹⁹ United Nations Development Business (UNDB) online, or Development Gateway Foundation (Market). IFAD's assistance may be sought for the publication of Specific Procurement Notices in these websites.

- i. Other donor-funded projects in Pakistan, development partners and other SCRP partners, embassies of IFAD member countries in Pakistan
- j. Specialized procurement websites (e.g. UN Development Business, Development Gateway Foundation, Development Ex, Compass, etc.) and search engines
- k. Professional organizations or associations
- l. Business seminars, visitors, trade representations
- m. Trade publications, professional journals, catalogues, and other commercial media
- n. Local telephone directories.

279. A background check should be conducted on all entities that have never worked for IFAD previously. When launching a restricted bid under national shopping, the PS, in collaboration with the technical staff, is responsible for identifying a good mix of qualified candidates with the appropriate expertise from the above sources, and preparing an official shortlist.

280. The shortlist is prepared on the basis of set criteria such as the technical and financial capability of the supplier, capacity to supply the goods/complete the works/provide the services in the required timeframe, past performance, etc. The shortlist should contain 3 to 4 suppliers for very small value contracts or individual consultants, and 5 to 7 suppliers for larger value contracts. The shortlist is reviewed by the technical team as well as FMS and approved by the Project Director. Requests for quotations are prepared and issued to different vendors on their request/demand and award framework contract with the lowest evaluate vendor for the whole year through this process. Framework agreement shall be generally adopted in the following cases:

- a. Goods that can be procured off-the-shelf, or are of common use with standard specification;
- b. Non – Consulting services that are of a simple and non-complex nature and may be required from time to time.
- c. Small value contractor for works under emergency operations.
- d. Selection of vendors for the whole year for purchase of expendable items such as stationery, printer tonner, office utilities, repair of vehicles, vehicles lubricants, fuel for vehicles, vehicles services etc.
- e. The procurement Specialist shall check availability of required goods form stores under any existing framework agreement;
- f. The Procurement team shall contact the existing vendor with whom arrangements are made under the framework agreement;
- g. The PS shall convey the requirements through formal purchase order to the vendor.
- h. The PS will place the order detailing the nature and amount of procurement(s) made, date of placing order and contact details of vendor (conditions are already agreed with the vendor/supplier under the frame work contracting mechanism for each delivery of goods and services being made).

281. Request for Quotation. The RFQ selection procedure consists of comparing price quotations obtained from at least 3 shortlisted suppliers. The RFQ is prepared by the Procurement Specialist and should contain the description and quantity of the goods, specifications of works, or description of services, and the desired delivery/completion place and date. It is reviewed by the MFA and signed by the Project Director. After the RFQ is approved, a personalized invitation to submit a quotation is addressed directly to each shortlisted firm; a written receipt of acknowledgement is obtained from each firm.

282. Restricted Bidding (Non-consulting services). Limited international or national bidding procedures are used for non-consulting services above USD 100,000. The procedure is similar to the open competitive bidding described above, except those invitations to bid are directly addressed to pre-identified bidders instead of being advertised. This is also an appropriate method of procurement (i) for goods and works of a very small value, (ii) in emergency situations, (iii) when the number of potential suppliers is very limited, or (iv) when an open competitive bid has failed to result in an award of contract.

283. Force Account. Force account work (such as construction, equipment installation and non-consulting services) is work performed by a government department in the borrower/recipient country using its own personnel and equipment. In certain circumstances, this may be the only practical procurement method. The force account method requires the borrower/ recipient to set maximum aggregate amounts for use of the method, for which IFAD shall give its NO, and apply the same rigorous quality checks and inspection as for contracts awarded to third parties. Use of the force account method shall be justified and may be used, subject to IFAD's NO, only under any of the following circumstances:

- a) the quantities of construction and installation works involved cannot be determined in advance;
- b) the construction and installation works are small and scattered or located in remote areas where qualified construction firms are unlikely to bid at reasonable prices;
- c) the construction and installation works must be undertaken without disrupting ongoing operations

284. Further the force account submission to IFAD for its No Objection shall be for the following procurement files and documents:

- a) Justification Report for using Force Account (if not already submitted along with PP);
- b) Solicitation Document for Public entity to be engaged on Force Account basis;
- c) Negotiation report evidencing verification of resources, capacities, and competence;
- d) Draft Agreement duly filled;
- e) Signed agreement (for information and record);
- f) Agreement amendments exceeding 10% of the original value; and
- g) Agreement extensions exceeding 25% of the original duration.

1. Consulting Services (QCBS, FBS, LCS, and CQS)

285. Expression of Interests (EOIs). Whether from consulting firms or individual consultants, 'intellectual' consulting services may warrant the need for an expression of interest (EOI), which is the equivalent of the pre-qualification process for consulting services and presents the same advantages. The EOI is similar to the pre-qualification procedure described above. The main difference in the content of the EOI notice is the indication of whether the EOI is for consulting firms or individuals. The evaluation process is the same, and once the Evaluation Committee members sign the evaluation report, it is approved by the PD and sent to IFAD for No Objection along with the request for proposals document.

286. Request for Proposal (RFP): RFPs are issued for the procurement of consulting services valued (as per the given thresholds). The RFP is prepared by the Procurement Specialist and consists of four documents:

- a. Letter of invitation (brief description of Project, funding source, summary of services required, specific conditions or criteria, currency of submission, name of contact person for queries, date/time/address for submission of proposals) Information to consultants (evaluation criteria

and modalities, level of key staff inputs or total budget, clause of preference for developing countries firms, proposal validity period, and any other relevant information or instruction)

- b. TOR provided by the requesting staff
- c. Model contract.

287. The RFP is validated by the technical team and approved by the PD. The prior review of IFAD is required for services valued (see above threshold table), as well as for all services procured through sole-source-selection, regardless of the value. After the RFP is approved, a personalized invitation to submit a proposal is issued directly to each shortlisted firm; a written receipt of acknowledgement is obtained from each firm.

288. Individual Consultants. Individual consultants are selected on the basis of a comparison of CVs from at least three shortlisted individuals. IFAD's prior review is required irrespective of value. The following criteria are taken into account for the selection:

- a. Technical capacity of consultant
- b. Academic qualifications and professional experience of consultant
- b. Knowledge of the region/country
- c. Proficiency in local languages or other criteria deemed relevant regarding the ToR. Based on a review of CVs by the selection committee (including the DPDs, the Monitoring and Evaluation (M&E) Specialist and the requesting staff/section head), the PS establishes a selection report and submits it to the PD for contract award (after IFAD No Objection as required).

289. Sole-Source Selection (SSS)/Direct Contracting (DC). SSS/DC of the consulting firm lacks the benefits of competition in terms of quality and cost. It is not transparent in selection and may encourage unacceptable practices. Therefore, SSS should be used only in exceptional circumstances and only after securing IFAD's NO. Any request for SSS/DC by a borrower/recipient must be accompanied by a detailed justification, which will be carefully examined by IFAD to ensure that no alternative selection methods can be used. To receive IFAD's NO, it must be demonstrated that there is a clear advantage to SSS over competitive selection. Lack of time to conduct competitive procurement is not an acceptable justification for the use of SSS/DC. The SSS/DC may be used in the following cases:

- a) tasks that are a natural continuation of previous work done by the consulting firm;
- b) situations in which rapid selection is essential, such as an emergency;
- c) selections of low value as agreed with IFAD and as defined in the letter to the borrower;
- d) only one firm is qualified or has the necessary experience for the assignment.
- e) All SSS/direct contracting processes are subject to prior review by IFAD.

2. General Procurement

290. Procurement Plan. A procurement plan for the first 18 months was prepared during the project design process and is depicted in Annex 8. This procurement plan will be updated at Project start-up. At project start-up, the PMU shall update, complete and furnish to IFAD for its approval, the 18 months Procurement Plan through the OPEN (IFAD's Online Procurement End to End System) as mandatory. This will be followed by successive 12-month plans synchronized with the AWPBs during implementation.

291. Procurement Methods. IFAD will incorporate relevant thresholds in the Project Procurement Arrangement (PPA) to necessitate provisions for Post or Prior review of contracts. Contracts subject to IFAD's prior review modality will seek IFAD's approval through an OPEN system, thereby mitigating the risks associated with prior review procurements to an acceptable level. All requests for IFAD prior

review and No Objection (including AWPB, Procurement Plan, Non Procurement) documents at different stages subjected to IFAD prior review, project guidelines and manuals, etc.) will be carried out through the OPEN (End-to-End system).

292. SECAP requirements will be incorporated into the Bid Documents. Adherence is necessary to IFAD's Grievance Procedure and Project will incorporate any future developments pertaining to Procurement Management as they arise.

293. Regular updates on contract statuses will be conducted through OPEN Contract Management Module. The Procurement Plan (PP) will serve as a monitoring and review tool. The project will be encouraged to consistently update and enhance the Procurement Plans (PP) within IFAD's OPEN System. Procurement activities will be methodically organized based on procurement categories (goods/works/services).

294. Enquiries from Bidders. To maintain the integrity and transparency of the process, potential bidders may only clarify or seek additional information related to the relevant bidding or proposal documents in writing and not by telephone or in person. In the same way, the PS, after consultation with the requesting staff is necessary, shall only provide clarification in writing and to all invitees (unless the clarification is clearly only applicable to the invitee who asked the question). The clarification shall be written in such a way as to maintain the anonymity of bidders and without mentioning the name of the firm that asked the question(s).

295. Bid Extension and Cancellation. Based on a recommendation from the procurement, the PD may propose an extension of the closing date for submission of bids for any practical or justifiable reason, such as: modification to the bidding documents after issue; need for additional research/effort by bidders to submit a responsive bid; request for a time extension by two or more bidders; and unforeseen administrative issues requiring a postponement of the proposed bid opening. Proposals for extension of the bid deadline shall be referred immediately to the Evaluation Committee and the IFAD Country Director (through the PD) for a decision. If the extension is granted, the extension shall be notified to all prospective bidders at the same time and in writing. Notification of the extension must be copied to the procurement file and the new dates entered into the PTS.

296. A bidding process may be cancelled at any time before the deadline for receipt of bids subject to the proposal of the Procurement Specialist, and the approval of the PD and IFAD. Justifications for cancellation are:

- a. The procurement need has ceased to exist or changed significantly;
- b. Insufficient funding is available for the procurement;
- c. There is a significant change in the required technical details, bidding or contracted conditions, such that the recommencement of proceedings is necessary;
- d. There is evidence of collusion among bidders; or
- e. Cancellation is deemed to be in the interest of national security.

297. The Procurement Specialist will in such a case notify prospective bidders, refund fees paid for the purchase of bidding documents, return any submitted bids unopened and notify all other involved parties of the cancellation. The cancellation must be documented in the procurement file and recorded in the PTS.

298. Waiver of Competitive Bidding. There are certain circumstances in which competition may not be possible or practical. These are exceptional cases where direct contracting for goods/works or single-source-selection for consultants presents a clear advantage over competition. These exceptional cases are listed in the Sindh-PPRA and in IFAD's Procurement Handbook. Should the PMU be required to use this procurement modality, a request for waiver of competitive bidding would need to be addressed to

the Project Director and to IFAD, regardless of the contract value²⁰. The request for waiver must include the following information:

- a. Description of goods, works or services
- b. Full justification for waiver request
- c. Detail of costs and demonstration of reasonableness of costs
- d. Demonstration of the competitiveness of the retained proposal or quotation
- e. Past experience with the retained supplier.
- f. The procurement process will only be pursued if IFAD’s No Objection is secured.

299. Blacklisting of Suppliers and Contractors. As indicated in the Sindh-PPRA, any supplier or contractor that consistently fails to provide satisfactory performances or is found to be indulging in corrupt or fraudulent practices shall be permanently or temporarily barred from participating in SCRP procurement proceedings. The supplier or contractor to be blacklisted is given the opportunity of being heard before such barring action is publicized and communicated to the Sindh-PPRA and to IFAD.

300. Selection of Suppliers – Bid Opening and Evaluation Committees. The SCRP PS will oversee organizing bid opening procedures and evaluation committee meetings. The PMU bid opening committee is composed of 5 members: a) a Project Director (as Chairperson), b) M&E Specialist c) Agribusiness/Training Officer/4P Specialist, d) the relevant component heads, and e) Representative of relevant end-user entity and the PS who serves as the Secretary. The PS is therefore responsible for maintaining the attendance sheets and preparing the minutes of the bid opening meetings. Due to the nature of the procurement handled at regional level, there is normally no bid opening at PMU.

Table 8:PMU evaluation committee consists of five members

Title	Role
Project Director	Chairperson
M&E Specialist	Member
Value Chain Specialist	Member
Heads of relevant component	Member
Representative of relevant end-user entity	Member
Procurement Specialist	Secretary

301. In addition to the above, the Committee may co-opt non-members (such as consultants or advisors with special expertise) to its meetings, on an as-needed basis, particularly in the case of complex procurement. The PS is not a member but serves as Secretary to the Committee; as such, s/he is responsible for guiding the evaluation process, ensuring that applicable rules and procedures are correctly followed, and drafting the evaluation reports. For low value procurement at PMU level, the evaluation committee is reduced to three members, including the PD/Deputy Project Directors (DPDs), the FMS and the requesting staff or component head. The Procurement Specialist serves as the Secretary for the committee and is responsible for drafting the bid evaluation reports.

302. Submission, Receipt and Opening of Bids. The time allowed for the submission of bids varies according to the size and complexity of the contract. Starting on the date of publication of the ITB, a minimum of 6 weeks is generally allowed for ICB, while at least 4 weeks are allowed for NCB. Bidders may send their offers or proposals in a sealed envelope by mail or hand delivery to the SCRP. The PS (or the CMO at the PMU) receives the bids, stamps the envelopes with the day’s date and registers them

²⁰ Except for petty purchases not exceeding PKR 50,000 (or USD 323 equivalent), for which direct cash purchase is allowed without a waiver

in a special dedicated logbook. The representatives of the bidders submitting a bid are requested to sign the logbook. All bids are kept in a tender box located in a locked cabinet until the bid opening date. The offers or proposals received after the submission deadline are returned unopened to the bidders.

303. The bids²¹ are opened in public, preferably on the day of the submission deadline, in the presence of members of the bid opening committee and representatives of the bidders. The chairperson of the committee is responsible for opening each bid and reading aloud the following information²²:

- a. Sequential number attributed to the bid
- b. Name / country of origin of the bidder
- c. Currency, unit price and amount of the bid, and discounts offered, if any
- d. Amount of bid security, if any²³.

304. This information is recorded in the bid logbook by the Procurement Specialist and signed by the chairperson of the committee. Bids that are obviously not responsive (e.g. no or inadequate bid security) are rejected at this stage. The representatives of bidders are requested to sign the attendance sheet and are then invited to leave, and no further communication may take place between the bidders and the SCRPs bid opening committee or evaluation committee until the contract award is announced. The Procurement Specialist is responsible for preparing minutes of the bid opening meeting, which are signed by the chairperson and members of the committee.

305. In the case of RFQs, quotations may be sent directly to the PS by mail or hand delivered. Even though no public opening of the quotations submitted is required, all quotations must be opened on a predetermined date and time to avoid the opportunity for any invitee to become aware of the prices quoted by other invitees.

306. Cancellation of Bids after Bid Opening. ITBs, RFQs and RFPs may be cancelled after the bid opening date by recommendation of the Procurement Specialist, following validation of the evaluation committee and PD approval, and subject to IFAD's No Objection, in the following instances:

- a. Only one (or no) bid was presented or after rejection of all other bids only one (or no) bid remains for consideration;
- b. The bids were presented with unacceptable reservations and conditions; or
- c. The evaluation committee confirms that the lowest priced bid is higher than the budgetary provision.
- d. In such a case, the procurement unit will:
- e. Obtain approval of the evaluation committee and the PD for cancellation of the ITB/RFQ/RFP;
- f. Notify all bidders that the ITB/RFQ/RFP process has been cancelled and return any bid securities;
- g. Depending on the causes, decide whether the procurement is to be cancelled or resumed, and by what method.

²¹ In the case of two-envelope bidding where separate technical and financial bids are submitted, only the technical bid will be opened for evaluation at the initial bid opening. The financial bids are retained unopened pending a second public opening of those bids achieving more than the minimum technical score

²² The head of the committee may request the assistance of the Procurement Specialist or decide to delegate this task to another member of the committee or to the Procurement Specialist.

²³ All bid securities are given to the Procurement Specialist for review, registration and safekeeping.

- h. If the procurement is to be resumed, resubmit all documents to the requesting staff for preparation of revised specifications/TOR, or prepare new bidding documents appropriate to the new procurement method proposed.

307. Extension of bid validity. If, due to unforeseen circumstances, the contract award cannot be completed within the duration of bid validity specified in the bidding documents, the Procurement Specialist may request a bid validity extension from the responsive bidders, upon instruction from the PD. The additional time required to complete the evaluation, obtain the necessary approvals, and award the contract is estimated by the Procurement Specialist and a new bid validity date is determined accordingly. Bidders who refuse this request may withdraw from the bid without incurring any penalty. However, bidders who agree are required to extend their bid securities to the new validity date. The quoted price and other conditions of their bids must remain unchanged.

308. Evaluation of bids. Bidders' offers, and proposals are evaluated based on the criteria and procedures specified in the bidding documents and in conformity with national procurement rules and IFAD guidelines. The first step in the evaluation process consists of ensuring that (i) the bids received meet the eligibility requirements of the national procurement laws and IFAD requirements, (ii) the bids do not contain any material computation error, are properly signed and are in conformity with the bidding documents, and (iii) the required bid securities are attached. Material deviations from, or reservations to the terms, conditions, and specifications in the bidding documents, are causes for rejecting a bid or proposal.

309. Evaluation of offers. Offers from responsive bids are evaluated exclusively based on the criteria spelled out in the ITB. Under the single envelope bidding system, the evaluation committee conducts the technical evaluation followed immediately by the financial evaluation, in one stage. The evaluation criteria are assigned weights in order obtain an adequate score. Besides the quoted price (for which the preference margin must be taken into account, if specified in the ITB), the following criteria may be considered in the evaluation:

- a. Conformity of goods/works to specifications and/or drawings
- b. Product quality, i.e., conformity to national/international standards
- c. Manufacturers or distributor's authorization where applicable
- d. Delivery or completion time
- e. Compliance with SCRP General Terms and Conditions
- f. Local after-sales service
- g. Spare parts availability
- h. Technical and financial capacity of the supplier.

310. The evaluation committee tabulates all bids on a summary sheet. Only bids meeting or exceeding the specifications of the ITB shall be considered as acceptable. The lowest evaluated responsive bid is normally recommended for contract award.

311. Evaluation of Proposals. The RFP method normally calls for using the two envelopes bidding system, i.e. seeking both a technical and financial proposals in two separate envelopes. The evaluation process is therefore, split into two separate stages. The weighting to be given to each proposal must first be determined. Usually, the technical proposal is given 70%-80% of the overall score, and the financial proposal 30%-20%. The more complex the assignment and the more significant the end product, the less comparable the proposals and the less influence price should have on the selection; thus, the points allotted to the financial proposal would be lower. On the contrary, for tasks of a more straightforward nature, price can play a significant part in the selection process, provided that the other criteria are also met.

312. To achieve best value for money and to avoid any bias, it is preferable to develop a detailed list of pre-defined evaluation criteria. Points are assigned to each selection criterion, including the price. The evaluation committee must follow the process and criteria indicated in the RFP. Proposals are to be opened accordingly (first technical, then financial proposals). The bidders should be considered qualified and responsive if they score at least 70-80% marks (or as stated in the RFP) on the technical component. The bidders who do not meet this minimum score must be rejected as being non-responsive and their financial proposals are not to be opened. Approval on the technical evaluation is sought from the PD prior to proceeding with the financial evaluation. The financial proposal of only those bidders who meet the qualifying threshold during technical evaluation should be opened and examined. The proposal should provide the detailed cost estimate such as daily fee rate, number of workdays and travel cost estimates. The evaluation committee prepares a sheet summarizing the results of the evaluation for both the technical and the financial proposals.

313. In the case of procurement using the QCBS method, recommendation for award of contract is normally made to the bidder whose technical proposal and financial proposal, when taken together, achieve the highest overall score. In the case of the fixed budget selection method, the consulting firm that scored the highest technical points within the limits of the budget is selected. In the case of the least cost selection method, the firm with the lowest financial proposal is selected, provided that it has attained the minimum technical score.

314. Post-qualification of Bids. Prior to finalizing the evaluation report, the evaluation committee should conduct a post-qualification²⁴ of the lowest evaluated responsive bidder to determine whether it has the resources, experience and qualifications to perform the contract in a satisfactory manner. Using the criteria specified in the bidding documents, this review should include an assessment of the bidder's financial and physical resources available to undertake the contract (including his current workload), based on the evidence requested in the bidding documents and submitted by the bidders. If the lowest evaluated responsive bidder fails post-qualification, his bid should be rejected²⁵, and the next ranked bidder should then be subject to post-qualification examination. If successful, this bidder should receive the award based on the PD's approval and IFAD's No Objection (if required). If not, the process continues with the other bidders. The results of the post-qualification exercise must be included in the evaluation report, as well as the reasons for disqualifying any bidder.

315. Evaluation Report. The summary evaluation sheets are used as the basis for the PS to prepare a bid or proposal evaluation report describing the evaluation process and justifying the recommendation for award of contract. All members of the evaluation committee must sign the evaluation summary sheet and the recommendation of award. They are attached to the bid evaluation report and, together with the minutes of the bid opening, are forwarded to the PD for approval. They are then transmitted to IFAD for No Objection.

316. Evaluation of Quotations. In the case of quotations received through an RFQ, the evaluation is based on the following factors:

- a. Conformity to specifications/TOR
- b. Product quality, i.e. conformity to national/international product standards
- c. Promised delivery time
- d. Compliance with SCRP General Terms and Conditions

²⁴ If pre-qualification was conducted, the lowest evaluated responsive bid should be recommended for the award of contract, unless the bidder's qualifications have since materially deteriorated, or if the bidder has since received additional work that reduces the available capacity.

²⁵ The rejection of a bid for reasons of qualification requires substantial justification, which should be clearly documented in the evaluation report.

- e. In-country after-sales maintenance facilities
- f. Landed price.

317. A three-member evaluation committee as described above carries out the evaluation. The Procurement Specialist prepares a sheet summarizing all examined quotations. The quotation that is compliant with the requirements of the RFQ and offers the lowest price is recommended for award of contract or purchase order. No post-qualification is conducted due to the low value and lack of complexity of the contract. The recommendation for award is indicated at the bottom of the summary sheet, which is signed by all members of the evaluation committee. The award decision is made by the Project Director (who may delegate his authority to another senior officer at PMU).

318. Award and Signature of Contracts. The approval authority for contract awards is the PD. When reviewing the evaluation report submitted by the evaluation committee, the PD ensures that (i) there are no inaccuracies in the report, (ii) the evaluation was conducted in accordance with applicable rules, procedures, and provisions of the bid documents, and (iii) the award recommendation is consistent with the evaluation. Before giving approval, the PD also ensures that any written complaints made by bidders concerning the procurement process have been reviewed and responded to²⁶. The PD may issue a full or a qualified approval to the award of contract or the action recommended by the evaluation committee. In case of a qualified approval, the evaluation committee has 3 working days to make corrections to the report or provide clear explanations before final issue. Once approved, the PD addresses a request for No Objection to IFAD, attaching the bid opening minutes, the evaluation report and summary sheet of bids/proposals, and the award recommendation. Only once IFAD's unconditional No Objection is received should the contract award procedure be commenced. The Procurement Specialist can then enter the evaluation date, name of selected supplier and date of IFAD's No Objection in the PTS, and update the procurement plan accordingly.

319. Once IFAD's No Objection is obtained, the Procurement Specialist informs the unsuccessful bidders in writing and sends a notice of award to the winning bidder who is invited to come to the PMU to confirm the terms and conditions of the contract prior to the document being drafted. Award notices are published on the Sindh-PPRA websites or bulletin boards as soon as the evaluation process has been completed and the contract has been awarded.

320. Complaints from Bidders. Aggrieved bidders are allowed a maximum of 15 days after announcement of the bid evaluation report to file a complaint. In order to investigate the complaint(s), the SCRP constitutes a special committee (different from the evaluation committee and comprising an odd number of persons) that has 15 days to make a decision. Any unsatisfied bidder may then lodge an appeal in the relevant court of jurisdiction. There are three distinct types of complaints that are typically found in a Project; i.e., (a) complaints concerning bid protest from aggrieved contractors, suppliers, service providers and consultants, which are addressed during or immediately after the bid process, (b) performance disputes, which are governed by the General Conditions of Contract (GCC) and Special Conditions of Contract (SCC), and, (c) non procurement related complaints from any parties, which are addressed in the PIM. A complaint is any notification regarding an alleged illegal or improper procurement action and/or conduct of procurement officials, consultants, and/or sub-contractors directly or indirectly supporting a project or associated with its implementation, which the complainant believes is wrong, either under the law or on the grounds of unacceptable behavior.

321. The PMU shall ensure the confidentiality of any complainant and shall hold harmless any person reporting a complaint, oftentimes referred to as a "whistle blower", with provisions to shield complainant(s) or public official(s) from retaliation when they provide information that they reasonably believe to be a violation of the provisions of the agreed procedures. All procurement related complaints

²⁶ If the complaint reveals a serious breach of procedures or ethics, or if directed by the independent Procurement Review Panel, the Committee shall reject the evaluation report and call for re-bidding.

shall be addressed to the PMU/Project Director, to which the PMU shall respond within 15 days. If PMU needs more time due to complex investigation related to the complaints, then it shall state so in writing to the complainants, but in any case, a complaint shall be put into closure within 25 business days. The complainant need not be personally aggrieved or impacted, and may be acting merely in accordance with a sense of civic duty, such as an NGO or private citizen, in bringing an occurrence to the attention of project authorities. All complaints, whether notified by persons who feel personally aggrieved or acting out of a sense of civic duty, will be acknowledged and acted upon by responsible authorities in accordance with the procedures specified in this section. Concerning bid protests, from time to time, with and without justification bidders, suppliers, contractors, service providers and consultants may choose to lodge a complaint concerning some aspect of the contract award process. In the event the contract has been awarded and a contractual relationship exists between the parties, there are established dispute mechanisms in the GCC that shall be followed, up to and including judicial review. A formal mechanism to satisfactorily respond to bid protest complaints must be followed, consistent with this Manual and the steps to be followed by aggrieved bidders, suppliers, contractors and consultants in the complaint's procedure will be specified in the Bid/Request for Proposal documents

322. Complaints may also be addressed directly to IFAD, to which IFAD will resolve the complaints within its service standard.

323. Preparation of Contract or Purchase Order: The Procurement Specialist drafts the contracts based on the standard model and the conditions and modalities contained in the bidding documents and the offers/proposals. The contracts are numbered using the unique procurement case identification number preceded by the prefix GC (goods contract), WC (works contract), SC (services contract), or PO (purchase order). The drafted contract is submitted to the MFA/M&E Specialist or technical sector specialists for review and validation. It is then reviewed with the supplier/contractor and the performance security, if any, is collected by the FMS before the contract is submitted to the PD for review. Once his/her remarks are taken into account, the final version is printed in two originals, which are signed by the PD and by the supplier/contractor.

324. As soon as the contract is effective, bid securities are returned to all bidders. Signed copy of the contract must be sent to IFAD before the first withdrawal application relating to the contract. A copy of the contract is also sent to the P&DD GoS. The Contract Management Officer updates the contract details online in ICP-CM. The procurement plan is also updated with actual dates accordingly.

M. Types of Contracts

325. Goods. For goods valued at more than US\$1,000 (procured through an ITB), IFAD standard contract for the supply of goods shall be issued. The contract must indicate:

- a. The nature, quantity and unit cost of the goods
- b. The technical specifications and required norms or standards
- c. The general conditions of the contract
- d. The special conditions of the contract (e.g. Guarantee and coverage period, insurance, etc.)
- e. Special instructions relating to packing and freight
- f. Special instructions relating to delivery and invoicing
- g. Advance payments, if any
- h. Payment terms.

326. Works. For works valued at more than USD 20,000 (procured through an ITB), IFAD standard template for works contract shall be issued. The contract must include:

- a. A detailed description of the works, the cost of the works (the drawings, norms, technical specifications and supplier's detailed estimate must be included as annexes)
- b. The valuation of beneficiaries' contributions in the cost of the works, and in each statement of acceptance of work to be invoiced
- c. The general conditions for the execution of the contract
- d. The special conditions of the contract (e.g. guarantee and coverage period, surety deduction, insurance, etc.)
- e. Schedule of works and corresponding delivery dates
- f. Advance payments, if any
- g. Payment terms (completion certificate from independent firm, signature of statements of acceptance of work, etc.)
- h. Payment schedule.

327. Services. For services provided by consulting firms (procured through an RFP), IFAD standard templates for services contract (for lump sum services or time-based payments) shall be issued (see IFAD website for sample of framework contracts). The contract must include:

- a. A description of the nature and scope of the services (the TOR must be annexed to the contract)
- b. A reference to the technical proposal of the supplier
- c. A description of resources to be made available by the supplier (human, material, etc.)
- d. The general conditions of execution of the contract
- e. The list of expected outputs (e.g. intermediary and final report) and delivery dates
- f. The cost of services and reimbursable expenses (with a reference to the proposal submitted by the supplier)
- g. The procurement modalities for any assets and equipment needed in the performance of the contract
- h. A clause on the ownership of data produced, copyrights and assets acquired during the execution of the contract
- i. Payment terms (expense claims, supporting documents, financial reports, etc.)
- j. Payment schedule (deliverables, amounts and dates of invoicing).

1. Framework Contracts

328. Framework (or "call-off") contracts can provide an efficient, cost effective and flexible means to procure goods, works or services that are required continuously or repeatedly over a set period of time (see Sindh-PPRA/PPRA website for sample of framework contracts).

329. Framework contracts are particularly useful for small scale works that are readily available from the local supply market. Although there are no set rules for the use of framework Contracts, it is generally considered that if there is a high level of cumulative annual expenditure, or if there are more than 10-15 separate procurement processes initiated in a year, for a grouping of similar activities then a framework contract should be considered.

330. The objective of framework contracts is to minimize the cost and effort wasted in preparation of multiple similar small procurement processes by agreeing fixed prices with a supplier for a set period of time. The aggregation of requirements will result in greater price competition among providers to win the right to supply all requirements for the subject of the framework contract.

331. Routine refurbishment, repair and/or maintenance of offices and grounds are examples of the types of works that may be efficiently purchased under a framework contract.

332. Advances. Except where normal commercial practice or the interests of the Project so requires, no contract or purchase order shall be signed which requires an advance payment or payments on account of goods or performance of works and contracted services. Wherever an advance payment is agreed to, the Procurement Specialist records the reasons thereto in a note to the procurement file and enters the amount of the advance in the PTS. The Finance Unit also records the advance in the contract monitoring form. Where the Project Director may approve the payment of advances up to 20% of total contract amount, suppliers are required to provide a bank guarantee²⁷ in a form acceptable to the SCRIP and IFAD. The bank guarantee shall be valid for the duration of the contract or until the advance has been fully recovered. Any waiver to this rule requires prior authorization from IFAD. To recover the advance payment, the progress payments and the final payment shall be subject to a percentage deduction equal to the percentage that advance represents over the total price of the contract.

333. Contract amendments. Contract amendments are usually required in two situations:

- a. Certain aspects of the contract need to be changed at the request of the consultant/or a contractor (for example, a no-cost extension of the length of the contract) or
- b. The original contract is executed as planned and it is decided that further related works or services should be rendered by the same entity.
- c. When the amendment results in (i) a material modification of the initial contract, (ii) a relinquishment of the terms and conditions of the initial contract, (iii) an extension of the contract duration or (iv) any other modification resulting in a 10% (or more) increase in the initial contract amount, then the PD must inform the P&DD GoS. S/He must subsequently prepare a letter to be addressed by the P&DD GoS and IFAD for No Objection. This letter must detail all the modifications to the contract, and provide full justification for the amendment(s).

334. IFAD's decision is communicated to the P&D Board GoS in writing. In case of rejection, IFAD must explain the reasons why the amendment is considered contrary to the provisions of the financing agreement. In case of acceptance, the Procurement Specialist prepares the contract amendment, including all the clauses modifying or replacing the initial contract, and the new or amended ToR. The MFA/M&E and technical experts reviews/validates the contract amendment, which is then signed by the PD and the supplier/contractor. Copies are sent to IFAD and P&D Board GoS. Contract amendments are recorded in the online ICP-CM and the individual contract monitoring form.

335. Small Value Contracts. Small value contracts are defined as contracts for goods and works and non-consulting services under USD 1,000 that are procured through RFQ. After signature by the evaluation committee, the quotation summary sheet containing the recommendation for award is transmitted to the Project Director along with the quotations received, for review and award of the contract. In these cases, the contract award is approved by the Project Director. The related files are kept at the disposal of IFAD and P&D Board GoS for post review purposes.

336. Purchase orders are used for the acquisition of small value goods and for non-consulting services (e.g. maintenance and repairs, publications, advertisements, etc.). The Procurement Specialist prepares the purchase orders from the information contained in the supplier's quotation or estimate. The POs are signed by the PD and the MFA, as well as the supplier. At Regional level (for the procurement of goods, works and non-consulting services valued at less than USD 1,000), the purchase orders are signed by the RC (who receives a delegation of authority from the PD). Similarly, IFAD's²⁸

²⁸ <https://www.ifad.org/en/project-procurement>

simplified version of the services contract shall be used for small value consulting services by a firm. In the case of individual consultants, a specific contract. These contracts are also signed by the Project Director. The PO or contract amount, date and number are entered into the ICP-CM, and the procurement plan is also updated accordingly.

N. Contract Administration

337. At each stage of the procurement process (purchase requisition, prequalification, preparation of bidding documents, advertisement, bid opening, bid evaluation, post-qualification, contract signature and final delivery), the Procurement Specialist updates the procurement plan, indicating the date of the event immediately after the step is completed. All relevant information pertaining to procurement cases is also entered into the PTS database during the process. The requesting staff must remain informed of ongoing activities relating to the contract, as s/he is responsible for the monitoring of the contract implementation and for the evaluation of the supplier's performance. In collaboration with the Procurement Specialist, s/he must ensure that:

- a. Deliverables or milestones are completed by the supplier in a satisfactory manner, and as scheduled in the contract, and
- b. SCRCP complies with its obligations as specified in the contract in a timely manner (e.g. assistance with import licenses, approval of drawings and reports, provision of storage/working facilities, letters of invitation for visas, etc.).
- c. S/he must inform the Procurement Specialist and the MFA of any modifications in the execution of the contract, or any issues relating to the supplier's performance, so as to allow for timely action, such as the preparation of contract amendments or prevention/handling of claims or disputes in a timely manner.

338. This information is also used by the Procurement Specialist to provide the FMS with an update on the execution of major contracts in the quarterly progress reports. In the case of claims or disputes, the PD must immediately refer to the P&DD Board GoS who will in turn inform IFAD so that necessary actions may be taken. The Procurement Specialist enters information relating to contract amendments, claims or disputes into the PTS as well. As soon as a contract is signed by SCRCP, the MFA enters the relevant data into the accounting software, and the system automatically creates an individual contract monitoring form based on the IFAD 'C11' model. The contract monitoring form (CMF) contains the basic information on the contract (name/address of supplier, procurement file number, contract date/number/amount, AWPB activity code, brief description, bank guarantees) and details the payment schedule, including the milestones for each payment. Every time an invoice is received and a payment is made, the Accounts Officer enters the related information into accounting software, which automatically updates the CMF. The CMF is also updated whenever there is an amendment to the contract. At the end of each month, the Procurement Specialist checks the contract register against the CMF to ensure that all contracts are registered, and a CMF exists for each contract.

O. Contract Register (CR)/Contract Monitoring Tool (CMT)

339. The CMT is a mandatory platform for the recording and monitoring of all contracts. It includes:

- a. procurement contracts (goods, works, services, and non-consulting services): all contracts and purchase orders signed based on the PP covering all procurement methods and contract types;
- b. Grants (all first-level in kind and monetary grants): The procurement method for Grants will include competitive methods such as QCBS, QBS, FBS, CQS, ICS or non-competitive methods such as SSS or Selection based on project design/PIM; competitive methods are always recommended unless duly justified and exceptional; FBS is the closest method to grants where the ceiling is fixed;

- c. Implementing Partner contracts (MoU, MoA): including all agreements with all types of third parties who will be delegated procurement authority such as UN agencies and community participation contracts whether contracted competitively or not; procurement methods for these implementing partners are the following:
 - o Community contract (single source selection)
 - o Community contract (recipient or selection process defined at design/PIM)
 - o Community contract (competitive selection)
 - o Governmental body / State owned enterprises
 - o UN agency (competitive selection)
 - o UN agency (single source selection)
 - o NGO / International Organization (competitive selection)
 - o NGO / International Organization (single source selection)
- d. Subsidiary financing agreements and investment agreements: typically include financing contracts for micro-credit loans and other types of loans. In this case, only the first-level financing or refinancing contract selected using one of two methods shall be entered in the CMT:
 - o Selection as defined in Design/PIM; or
 - o Single Source Selection.

340. The Contract Register will be extracted as a Report directly from the CMT. It will be a cumulative document that is augmented progressively and automatically with the new contracts signed and inserted in the system.

341. The Project Management Unit will adopt the Contract Monitoring Tool deployed by IFAD and will dedicate sufficient resources to use and operate and generate reports from this system as instructed by IFAD. CMT Help section offers guidance and support on how to use this tool. The recording of contracts signed by Implementing Partners with third parties (goods, works, consulting services, non-consulting services, grants or loans).

342. Delivery of Goods, works and services: Delivery of goods: Goods are normally delivered to the PMU office in Karachi, or the RMUs in the concerned divisions. The PS and the CMO are responsible for receiving the goods; the presence of the requesting staff may be required for large value contracts. In the case of imported goods, the contract may specify that a pre-shipment inspection of the goods must be conducted by an international third-party agent. All shipping documents are sent by the supplier to the PMU and forwarded to the Procurement Specialist for tax and duty exemption formalities. Once obtained from the Ministry of Finance, the duty-free concession is forwarded to the supplier who is responsible for clearing shipments through customs upon arrival at the port/airport. The PS or CMO must be present when goods are released from customs. All external abnormalities to the shipment (e.g. dents, holes, cracks) or missing boxes/crates must be noted by the PS or CMO in the clearance receipt or bill of lading/airway bill, for reporting to the supplier and to the insurance company.

343. Upon receipt of goods procured by way of a goods contract, the Procurement Specialist, CMO and requesting staff conduct a detailed inspection of the goods before acceptance. They immediately fill out a receiving & inspection report, indicating the contract number and whether all goods ordered were received and in what condition. In case of a problem (damaged or missing goods), the PS or CMO notes the details on the RIR. S/he gives a copy of the RIR to the MFA for the accounting files, and uses the original to file the claim against the freight carrier, the insurance company and/or the supplier under the supervision of the FMS. The Procurement Specialist files the original RIR in the procurement file and inputs the date and number of the RIR in the PTS.

344. For small value goods procured by way of a purchase order, the Procurement Specialist or CMO checks the goods received against the PO directly on the delivery slip, which serves as the RIR. Depending on the remarks or reservations noted on the delivery slip, the supplier's invoice is either partially paid or not paid at all until the object of contention is resolved.

345. Delivery of Works. The delivery of works is usually completed in several tranches. The technical officer (requesting staff) of the PMU or DCUs, the Procurement Specialist and the representative of the end-user/beneficiaries all verify the work and sign the statements of work issued by the contractor. For large contracts, the supervising engineer (normally from a contracted engineering bureau) in charge of the monitoring and supervision of the works also issues certificates of completion to certify the amount of works completed.

346. The provisional and final takeover (i.e. receipt) of works is carried out by an ad hoc Inspection and acceptance committee. In the case of small value works (less than US\$ 20,000), the committee is made up of the Procurement Specialist, the requesting staff, a representative from the PMU (if applicable) and a representative of the beneficiaries. For large value works (US\$ 20,000 or more), the committee includes, in addition to the above-cited members, a representative of the relevant line agency and the supervising engineer. In both cases, a takeover report detailing any delay or fault in the execution of the works is signed by all members of the Inspection and acceptance committee. A copy of the report is given to the Procurement Specialist for updating of the PTS and for the procurement files. As the works progress and partial payments are issued, the MFA enters the data into the FM accounting software, which automatically updates the CMF. Upon completion of the works contract, a copy of the final acceptance certificate is given to the Procurement Specialist for updating of the ICP-CM and PTS.

347. Delivery of Services. The delivery of consulting services is materialized by the production of reports, studies or surveys, as indicated in the contract. The report is addressed at first to the requesting staff/component head who after review may send comments or request additional information from the consultant. After validation by the component head, the final report is sent to the Project Director for final review and approval. The acceptance of the report is materialized by the signature of the Project Director on the final version of the report. A copy of the final report is given to (i) the Procurement Specialist for updating of the PTS and (ii) to the Manager Finance to update the CMF.

348. Payment and Reporting. The procedures for verification and certification of invoices as well as payment by the Finance Unit are detailed in FM sections. The Manager Finance and Accounts (MFA) gives a copy of the invoices to the Procurement Specialist who enters the invoice date, number and amount into the PTS. Once the payment is made, the contract monitoring form is automatically updated in the accounting software. Reporting on procurement actions is achieved through the following documents:

- a. The procurement plan;
- b. The PTS reports;
- c. The contract register on ICP-CM

349. Once it is approved, the procurement plan is updated on a 'real-time' basis: The Procurement Specialist enters the actual date every time one of the actions in the procurement steps detailed in the PP is completed. At the end of the process, when the contract is signed, the Procurement Specialist enters in the PP the date and amount of the contract, as well as the name of the contractor. S/he also enters the details of the contract in the contract register, which is sent to IFAD at the end of each month. The PP also contains a separate sheet (linked to the detailed procurement plan sheets) that shows PP execution, i.e., actual vs. plan by component and by type of procurement (goods, works and services). Throughout the procurement process, the Procurement Specialist updates the Procurement Tracking System. The information entered in this database allows the Project to obtain detailed statistics and reports on the various stages of procurement activities, including processing delays,

execution by component, sub-component or expense category, suppliers by country of origin, comparisons by month/quarter/year, trends, etc. Promptly after the end of each month, the Procurement Specialist prepares a short section on the status of execution of the procurement plan. The section contains the summary of PP execution by component and by type of procurement, as well as an analysis of significant variances between actual and planned amounts, and explanations of delays in procurement execution.

350. File System/Record Management: an integral part of procurement processes. To ensure that the purpose and objectives of the procurement records can be best realized, all communications, decisions and instructions between IFAD and GoS, SCRPs and bidders, suppliers, contractors or consultants will be exchanged or recorded in writing. Best practice determines that each procurement activity will have its own separate file or folder or dossier where records are kept properly coded in chronological order, relating only to the matter of the procurement in question. The purpose of good record keeping is to be able to review at any one moment the entire historical record of the procurement of one requirement in a logical and sequential manner. Records relating to any procurement proceeding documents shall be maintained for a period of 10 years from the completion date. Each procurement dossier must contain the following elements;

- a. External label identifying the component and the tender (Works, Goods, Services).
- b. Separators indicating:
- c. ToR or Specifications or Quantities Maps (commonly referred to as BOQ). In this section are ToR or Quantities Specifications or Maps (commonly referred to as BOQ) sent to IFAD for NO. IFAD comments and corrections incorporated in the TOR or in the Specifications, the IFAD letter of referral (if so requested) and the final NO should also be archived;
- d. Announcement. Announcement of Request for Expression of Interest (REOI) or General Procurement Notices (GPN), Specific Procurement Notice (SPN) and letter requesting NO, incorporation of comments (if any), final announcement and copy of your publication in the newspapers with the largest circulation in the country with the respective date;
- e. Manifestation of Interest (EOI). Protocol of reception of Manifestations of Interest with a list of the companies that responded, the dates of the answer, the number of the documents in the PMU, the type and number of documents that arrived per company Mail and E-mail box of the PMU). For the Consulting processes, the Evaluation Report of the Manifestations of interest, the letter of transmission to the IFAD with Evaluation Report and short list proposed for submission of the RFP, the IFAD NO response on the short list;
- f. Request for Proposals (RFP) and Bidding Documents (BD). For the Consulting processes, RFQ's NO letter to IFAD, IFAD's response to comments and changes to be made, incorporation of these corrections in the final RFP, sending it to the IFAD for verification, receiving the final NO, sending the RFPs to the shortlisted companies (if any). For the Goods and Works processes, the letter of NO to the Bidding Documents (BD), the incorporation of the IFAD comments (if any), the submission of the corrected BDs for IFAD approval and the final NO of the IFAD.
- g. Correspondence exchanged on the RFP and BD. For the Consulting processes, receipts of reception of the RFP by the companies, letters to confirm the participation in the contest by these companies, clarifications requested in writing, sending the written explanations in the PMU to all shortlisted companies, requests for a written extension and granting such extension in writing to all shortlisting companies, where appropriate.
- h. For the processes of acquisition of Goods and Works, sales receipts of the specifications (BD), requests and clarification made by the companies, clarifications provided to all

companies, requests for written extension and grant of such extension in writing to all companies that have purchased the specifications (BD), if any.

- i. Notification of the Evaluation Committee. The Evaluation Committee proposed by the PD and respective approval (Dispatch).
 - j. Evaluation of Proposals. For the Consulting processes, Evaluation Report Submission Letter
 - k. Signed minutes of all meetings relating to the procurement, including pre-bid and negotiation meetings where these were held
 - l. A contract award notice
 - m. Any letter of tender acceptance to the supplier, contractor, or consultant
 - n. The signed contract document and contract acceptance
 - o. Any contract amendments
 - p. All contractual correspondence between the procuring entity and a supplier, contractor, or consultant
 - q. Post-contract documents relating to the fulfilment of contract obligations, in particular photocopies of bank guarantees, or payment guarantees
 - r. Signed minutes of any meetings related to contract management, including contract progress or review meetings
 - s. Signed delivery documents evidencing delivery of supplies or signed completion certificates in relation to a contract for services or works under the contract including any contract delivery records
 - t. A copy of all invoices for works, services or supplies including work-papers verifying the accuracy of payments claimed and details of the actual payment authorized
 - u. A copy of cumulative payment worksheets/records evidencing management of all payments made
 - v. A copy of all submissions to and all decisions of the appropriate approval authority related to the procurement including the approval of the invitation documents, approval of the evaluation report(s), contract award, approval of contract documents and contract amendments and any decision to suspend or cancel procurement proceedings
 - w. A copy of any claims made by the procuring entity in respect of any warranty, non-warranty, short supply, damage, and other claims upon the provider or upon the procuring entity
 - x. In the case of IFAD prior review, all submissions and correspondence in relation to the seeking of IFAD's NOs
 - y. A copy of any complain or action taken documentations; and
 - z. Any other communications relating to the procurement in questions including internal entity correspondence.
351. Other procurement-related coordination with IFAD: The PMU shall coordinate in advance with IFAD on the following matters and issues:
- a. Any changes to the PIM;
 - b. Any changes to the staffing of the Project Management Unit;
 - c. Composition of Evaluation committees;

- d. Summaries of Debriefing requests and copies of Protests for all prior review procurement activities before a decision is issued (optional for post review procurement activities);
- e. The PMU shall inform IFAD of any related Appeal filed to competent National Authorities (if applicable) immediately upon becoming aware of such an appeal;
- f. Procurement progress reports as well as special reports on critical issues;
- g. Details of defaulting or corrupt vendors;
- h. Debarment of a vendor who appears to be debarred by another MDB for validation by IFAD if cross-debarment should apply (for prior and post review); and
- i. Any other matter specifically requested by IFAD.

352. In addition to the above, the project will provide full assistance to IFAD implementation support, supervision, MTR, and project closing missions. The Project will avail all necessary staff and provide all required documents, records and files. The same applies for any IFAD audit or investigation.

353. Procurement Principles and Ethics. The PMU will strictly adhere to the IFAD Project Procurement Guidelines (2019) covering the key Procurement Principles:

- Ethics; Accountability; Competition;
- Fairness; Transparency;
- Efficiency, Effectiveness and Economy; and
- Best Value for Money.

354. Furthermore, the PMU/DCUs/Service Providers/Implementing Partners/Individual Consultants will strictly adhere to the provisions of IFAD's Policy on Preventing Fraud and Corruption in its Activities and Operations available at www.ifad.org/en/document-detail/asset/40738506. The Project shall ensure that this policy is clearly stated in all procurement documents (solicitation documents and contracts) and that all vendors comply with this policy. All such documents shall clearly include also IFAD's Anti-corruption Hotline:

Office of Audit and Oversight (AUO)

Investigation Section (IS)

Via Paolo di Dono 44
00142 Rome, Italy

Email : anticorruption@ifad.org

Phone : +39 0654592888

Fax : +39 0654597888

355. Combatting Corruption and Sexual Harassment: The PMU/DCUs/Service Providers/Implementing Partners/Individual Consultants will strictly adhere to the provisions of *IFAD's Policy to Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse* available at www.ifad.org/anticorruption_policy. The Project shall ensure that this policy is clearly stated in all procurement documents (solicitation documents and contracts) and that all vendors comply with this policy. All such documents shall clearly include also IFAD's Ethics Hotline:

Ethics Office (ETH)

Via Paolo di Dono 44
00142 Rome, Italy

Email: ethicsoffice@ifad.org

Phone: +39 06 5459 2525

<https://www.ifad.org/en/ethics>

356. Anti-Money Laundering and Countering the Financing of Terrorism. The PMU/DCUs/Service Providers/Implementing Partners/Individual Consultants shall ensure commitment to combating money laundering and terrorism financing consistent with IFAD's Anti-Money Laundering and Countering the Financing of Terrorism Policy available at <https://www.ifad.org/en/document-detail/asset/41942012>.

V. FINANCIAL MANAGEMENT

357. This chapter of PIM has been developed to assist the project management—especially the project’s financial management team in understanding the basic fiduciary requirements while implementing an IFAD-funded project. It draws on IFAD’s guidelines and references have been made where appropriate so the users can expand on their knowledge by consulting primary sources of information. A sound understanding of such requirements is critical to ensuring (a) proper control, accountability and reliability over funds and financial information; and (b) compatibility of PMU’s processes with IFAD and GoS policies and requirements.

Information on Reference material:

This document should be read together with the:

- ✓ Project financing agreement entered into between the Borrower and IFAD;
- ✓ Letter to the Borrower;
- ✓ IFAD General Conditions for Agricultural Development Financing;
- ✓ IFAD Loan Disbursement Handbook; (links given in this manual)
- ✓ IFAD Handbook on Financial Reporting and Auditing of IFAD-funded projects (links given in this manual)

358. Updates and changes to financial management arrangements. SCRCP Project is an IFAD-funded Project, therefore, in line with IFAD’s efforts to capacitate and support projects, this section was developed during the project design process. It is envisaged that ongoing improvements and updates to financial management arrangements be updated in this section of the PIM under supervision of the Financial Management Specialist and subject to IFAD no objection.

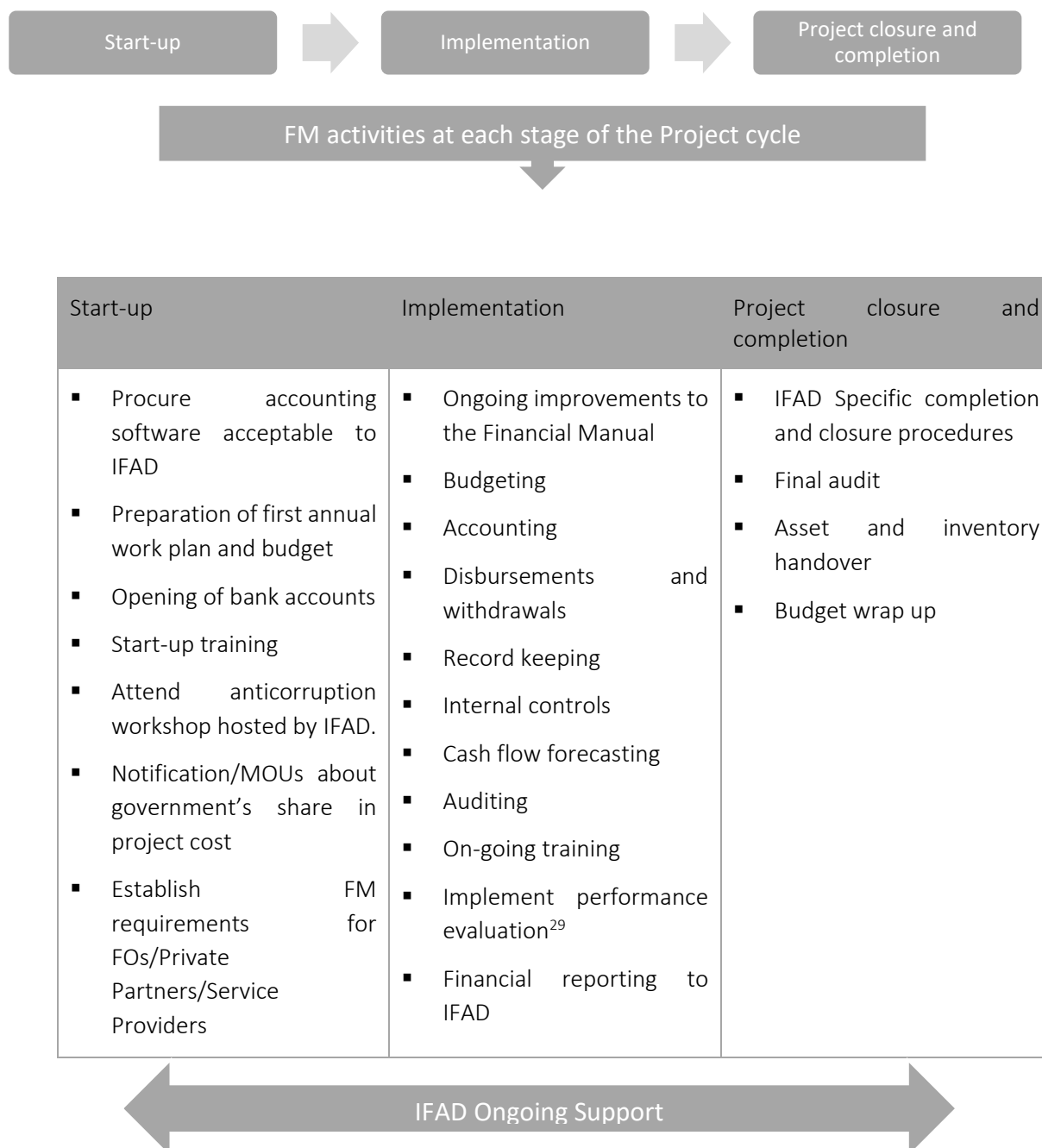
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Table 9: Project summary

Project Name	SCRCP Project
Financiers, Contributors, Facilities	To be inserted later
Project Effective Date	To be inserted later
Implementation Period	To be inserted later
Project Completion Date	To be inserted later
Project Closure Date	To be inserted later
Project Area	To be inserted later

A. Project Cycle and Financial Management Activities

360. The FM Team of SCRCP will have final responsibility for the execution of the financial management activities at each stage of the Project cycle as outlined below:



²⁹ Develop (in consultation with the Project Coordinator) a performance evaluation process for FM staff within 1 year of project commencement and document process in the PIM. This process should identify skills gaps and assist with identifying appropriate training interventions.

NB: SCRCP Project Financial Manager will have the final responsibility to prepare consolidated financial reports for submission to IFAD. Refer to [Section X \(Financial Reporting\)](#) for more detail.

B. Pre-Implementation Activities

361. During the start-up phase, it is recommended that Project staff to undertake following activities. This will ensure that the relevant staff are well informed and knowledgeable with regards to the core work processes that will—in turn, determine the implementation effectiveness of any project.

Activity	Overview
<i>Financial management staff appointment</i>	<ul style="list-style-type: none"> Provincial government to fill vacancies within PMU and DCUs to ensure that the project has required organization and staffing arrangements for project implementation. Refer to (VIII) for the proposed organogram.
<i>Accounting software</i>	<ul style="list-style-type: none"> PMU/Finance Manager to procure an accounting software and trained relevant staff in its use to ensure that a robust accounting function is in place; The software to use/incorporate correct chart of accounts (categories and components) in line with the detail in Schedule 2 of the Financing agreement with IFAD. Upload the Cost Table (Schedule 2 of the Financing Agreement) to the accounting software for the purposes of budgeting / monitoring.
<i>Open bank accounts</i>	<ul style="list-style-type: none"> Finance Manager to engage with provincial Finance Department and provincial Accountant General to open the Designated Accounts for the project. (Refer to Fund of Flows section – Designated Account for details).
<i>Preparation of first annual work plan and budget</i>	<ul style="list-style-type: none"> The Financial Manager to finalize the draft Annual Work plan and Budget, as directed by the Project Director, subject to IFAD no-objection. This budget will be a consolidation of the budgets obtained from DCUs (Refer to the process as outlined in Section V Annual Work Plan and Budgeting section).
<i>Staff training and capacity building</i>	<ul style="list-style-type: none"> Newly appointed financial Management staff will be required to complete the IFAD FM e-learning and submit completion certificates to IFAD within 1 month of date of appointment. Refer to the Useful links below for the training link. All staff are required to study the project related documents at project start-up. <p>**Other training at project start-up:</p> <ul style="list-style-type: none"> PMU Financial management training workshop for DCUs. <i>This training will be organized by the PMU Financial Manager and it will focus on PMU requirements (monthly reporting, document retention etc.) and cover practical issues / lessons learnt.</i>

C. Principles of Financial Management

362. IFAD requires the recipient of IFAD’s funds to make arrangements to ensure that the proceeds of any financing are used only for the purposes for which the financing was provided, with due attention to considerations of economy, efficiency and social equity. This responsibility is generally described as a “fiduciary obligation” with respect to the investment funds approved for financing provided by IFAD.

363. The primary responsibility for fiduciary obligation rests with the borrower/recipient (B/R) to maintain financial management (FM) arrangements that assist in meeting fiduciary obligations and that provide reasonable assurance to stakeholders that funds have been used as intended. IFAD’s role is to support the B/R’s capacity to meet this responsibility and to provide general oversight on the design and functioning of FM arrangements during project implementation. Financial management refers to the organization, budgeting, accounting, internal control, funds flow, financial reporting and internal and auditing arrangements by which B/Rs receive funds, spend them and record their use.

364. The country’s inherent risk rating has been “Substantial” bordering on being “High”. The country risk rating has worsened in recent years³⁰. The project would be using country PFM system for implementation and therefore several actions have been proposed in this part of the manual to keep fiduciary risks to acceptable level in the light of recent years external audit reports and inputs of relevant officials met during the PDR. PMU would be responsible to implement the proposed mitigation actions.

365. IFAD will monitor FM performance of SCRCP Project at regular intervals and provide implementation support as needed. IFAD has assessed disbursement risk initially based on the country portfolio review and overall fiduciary risk assessment as part of the PDR. This assessment is the basis for proposing disbursement arrangements for the project.

366. During project implementation, IFAD Supervision/Implementation Missions would examine the extent to which the project is identifying and managing fiduciary risks. IFAD will process disbursements after considering these FM risks, in addition to the specific characteristics of withdrawal applications (WAs), and will determine the timing, frequency and scope of ex-post checks to be performed on the applications.

367. In the light of disbursement experience, and where appropriate, IFAD also updates FM risk ratings and modifies disbursement arrangements for the remainder of the project period. IFAD will take remedial measures in case it is not satisfied with the way the project funds are being managed.

D. IFAD’S Policy on Preventing Fraud and Corruption

368. IFAD’s anticorruption policy establishes zero-tolerance towards prohibited practices, such as fraud and corruption, in IFAD-funded or managed operations and activities. Accordingly, the prevention and mitigation of fraud and corruption in its activities and operations are core components of IFAD’s development mandate and fiduciary duties. The anti-corruption policy has defined prohibited practices that are subject to remedial actions³¹.

1. Prohibited Practices

369. The following practices are considered to be prohibited practices when engaged in connection with an IFAD-financed and/or IFAD-managed operation or activity:

³⁰ For details, please see reports at <https://www.transparency.org/en/cpi/2020/index/pak> and at <https://www.internationalbudget.org/open-budget-survey/open-budget-index-rankings>

³¹ IFAD’s Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations is available at https://www.ifad.org/documents/38711624/40189363/fraudpolicy_eb86_e.pdf/e2ae80aa-e423-4d7c-a582-c01c1917b427

- (a) A “corrupt practice” is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value in order to improperly influence the actions of another party;
- (b) A “fraudulent practice” is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party in order to obtain a financial or other benefit or to avoid an obligation;
- (c) A “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including improperly influencing the actions of another party;
- (d) A “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party in order to improperly influence the actions of that or another party;
- (e) An “obstructive practice” is: (i) deliberately destroying, falsifying, altering or concealing evidence that may be material to an investigation by the Fund or making false statements to investigators in order to materially impede an investigation by the Fund; (ii) threatening, harassing or intimidating any party in order to prevent that party from disclosing its knowledge of matters relevant to an investigation by the Fund or from pursuing such an investigation; and/or (iii) the commission of any act intended to materially impede the exercise of the Fund’s contractual rights of audit, inspection and access to information.

2. General Principles

370. FAD has zero tolerance towards prohibited practices in its activities and operations. All individuals and entities that will be involved in implementing the SCRCP Project are required to take appropriate action to prevent, mitigate and combat prohibited practices as stipulated below.

371. IFAD protects Individuals and entities that help to prevent or report, in good faith, allegations of prohibited practices are protected against retaliation and to protect individuals and entities that are the subject of unfair or malicious allegations.

3. Responsibilities of the Provincial Government/Project

372. The provincial government/project will take appropriate action to prevent, mitigate and combat prohibited practices. In particular, they will:

- (a) Adopt appropriate fiduciary and administrative practices and institutional arrangements in order to ensure that the proceeds of any IFAD financing or financing managed by the Fund are used only for the purposes for which they were provided;
- (b) When taking action to enter into contractual relationship with a third party, conduct appropriate due diligence to ensure that the selected bidder or potential contractor is not publicly debarred by any of the IFIs and it otherwise is eligible;
- (c) Take appropriate action to inform third parties and beneficiaries of the prohibited practices and how to comply with IFAD’s Anti-corruption Policy; and
- (d) Include provisions in procurement documents and contracts with third parties to facilitate the implementation of IFAD’s Anti-Corruption Policy.

373. The policy encourages the government to have in place, in accordance with their laws and regulations, effective whistle-blower protection measures and confidential reporting channels in order to appropriately receive and address allegations of fraud and corruption relating to IFAD-financed projects.

4. Reporting

374. SCR Project can contact the IFAD Officer of Audit and Oversight to report any event that falls within the ambit of prohibited practices as outlined above. Relevant information is provided in the box.

How to contact the IFAD Office of Audit and Oversight

All communications are treated with the utmost CONFIDENTIALITY.

By phone: +39 06 54592888

By fax: +39 06 54597888

By e-mail: anticorruption@ifad.org

Through the online complaint form:

www.ifad.org/governance/anticorruption/how.htm

In person or by mail to:

IFAD Office of Audit and Oversight, Investigation Section

Via Paolo di Dono, 44

00142 Rome, Italy

375. A designated confidential and secure e-mail address for the receipt of allegations of prohibited practices is available on the Fund's website. If anyone suspects misconduct or wrongdoing, or have an allegation to report, he or she may contact anticorruption@ifad.org. This is secure and confidential channel managed by the Investigation Section of IFAD.

376. The SCR Project should also have similar reporting mechanism to get information on fraud, waste or abuse of funds from anyone who may have such information. The project should promote awareness that such safeguards have been provided to minimize risk of fraud, waste and abuse in the use of IFAD's funds.

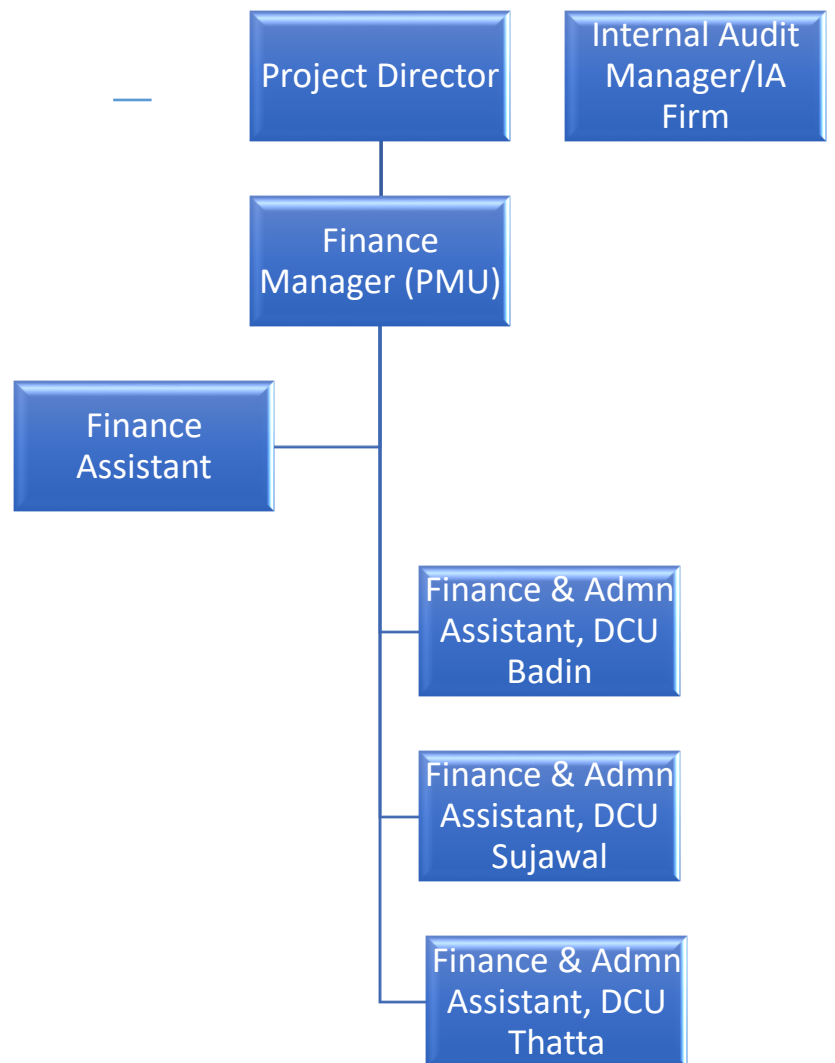
5. Remedies

377. In case it is determined—after due process, that an individual or an entity is involved in any of the prohibited acts stipulated above, the project would take a prompt remedial action. Detailed guidance is available in the IFAD's Policy on Preventing Fraud and Corruption.

E. FM Organizational Structure, Roles and Responsibilities

1. FM Organizational Structure

378. The FM team in PMU is headed by a full time Manager Finance and Accounts (MFA) who shall report to Project Director directly. The MFA is supported by a team of support staff. An Admin and Finance Assistant is also placed in each of the three (3) DCUs for FM related coordination with IPs, extension service providers, Private Partners under 4Ps arrangements, and Service Providers to enable these Implementing Partners to understand and comply with applicable compliance requirements in the use of project funds. The flowchart exhibits the organizational arrangement for the FM section.



Flow Chart 1: FM organizational arrangement

379. The Finance Assistants in DCUs would be functionally reporting to Finance Manager directly though they would be supporting the heads of DCUs in overall coordination and implementation.

380. The payment system shall be centralized at PMU though the Finance Assistants at District offices shall facilitate maintenance of proper internal controls, accounting, financial reporting etc. in partner organizations and verify the completeness and authenticity of documents submitted along with invoices to PMU for payments. The FM team would conduct periodic/random checks in fields to ensure that reporting to PMU is credible. Roles and responsibilities of key actors who will be involved in project FM are summarized below.

381. In addition to the permanent FM staff at PMU and DCUs, the project design envisages that partners/service providers—that will be engaged to support implementation shall have a acceptable FM capacity. This is critical since these partners will use IFAD’s funds and therefore they must comply with the applicable fiduciary requirements. PMU and DCUs will ensure effective facilitation, oversight and monitoring of these partner organizations.

2. Role of Finance Manager

382. The FM shall be responsible for establishing and managing the accounting and internal controls systems, reviewing and clearing documents and transactions, controlling the posting of transactions and the accuracy of the books, monitoring the budgets and treasury, Project funds and donor contributions, overseeing the closing of accounts, and preparing financial reports, year-end financial statements and annual audits.

1. General Management and Leadership

- i. Liaise with IFAD on all aspects of project’s financial management.
- ii. Lead capacity building activities in the area of financial management under the project to capacitate accounting staff within PMU and other partner organizations to comply with guidelines and policies and procedures.
- iii. Keep PD updated on latest developments and issues in project’s financial management and provide suggestion to the best possible option.
- iv. Maintain liaison with IFAD in managing the assignment account.
- v. Participate in Project Steering Committee meetings and activities; assist/advise the PD in all financial matters as and when required.

2. Budgeting and Planning

- i. Assist the PD in preparation of AWPB and facilitate in the approval of AWPB from Project Steering Committee.
- ii. Prepare report on monthly financial progress of the project for the attention of the PD and further discussions.
- iii. Prepare annual, quarterly and semi-annually disbursement forecasts for all components of the project/s in line with project’s procurement plan and Work Plan/Cash Plan.

3. Funds Management

- i. Ensure timely releases of counterpart funds from provincial government.
- ii. Liaison with P&D, line departments, Provincial Accountant General (AG) in connection with budget, releases, disbursement and other issues of financial management.

- iii. Prepare realistic cash forecasts on quarterly basis in coordination with the project team/implementing partners.
 - iv. Engage with IFAD for release of funds and maintenance of sufficient liquidity for project implementation.
 - v. Prepare and process withdrawal application in accordance with IFAD's Disbursement Guidelines for drawing funds from the assignment account(s).
 - vi. Track funds and follow up with National Bank of Pakistan and IFAD to ensure timely credit of funds into the project's assignment account(s).
4. Internal Controls
- i. Perform internal control assessment in view of the systemic weaknesses as reported from time to time in the supervision missions/audits/periodic inspections by PMU and take remedial actions
 - ii. Take measures to strengthen internal controls system as per IFAD's guidelines stipulated in this document;
 - iii. Assess the need of other monitoring controls, such as internal audit and suggest it to the management accordingly.
5. Expenditure/Payment Processing
- i. Ensure compliance with internal control framework—including applicable government rules and procedures while processing payments.
 - ii. Analyze, plan, design, implement, and monitor a system to augment internal controls in line with best practices in the process of payment and expenditure management.
 - iii. Apply pre-audit checks on all payments before payment from the assignment account(s) including budget availability, sanction of competent authority and compliance with applicable financial rules & regulations.
 - iv. Ensure that IFAD's No Objection Letter (NOL) is obtained for every prior review activity before processing any payment.
 - v. Prepare request for payment and forward to PD for approval after fulfilling all codal formalities.
 - vi. Ensure that only eligible payments are forwarded Coordinator's approval and drawing funds from the assignment account.
 - vii. Manage financial aspects of the contracts under implementation, including payment terms, purchase orders and variation orders.
6. Accounting and Record Management
- i. Record all transactions timely and accurately in the books of accounts and ensure that no expenditure remained unaccounted.
 - ii. Maintain accounts on cash basis as per government accounting procedure i.e. New Accounting Model.
 - iii. Ensure up-to-date maintenance of adequate registers, books of accounts and records in appropriate order and format to meet the government and IFAD's requirements and to

facilitate classification and analyzing the financial information for monitoring the project progress.

- iv. Prepare supplementary record, which provides timely and up-to-date financial information of contracts.
 - v. Maintain imprest /petty cash account (where applicable) and ensure maintenance of separate petty cash book and petty cash vouchers in compliance with approved procedures.
 - vi. Prepare monthly bank reconciliation statements of assignment accounts.
 - vii. Reconcile the expenditure on government prescribed format with the office of Accountant General Sindh on monthly basis.
 - viii. Be the payroll manager and process monthly payroll of project employees. Ensure proper payroll controls are applied and the payments are made directly in the Bank accounts.
 - ix. Prepare and process monthly project payroll and submit to PD for approval prior to making any payment under salaries.
 - x. Ensure that the fixed assets and inventory records are maintained for the project identifying location and user of each asset/inventory and arrange for the annual and periodical inventory of the assets/consumables.
 - xi. Ensure safe custody of all financial records for review by IFAD Missions, third party monitoring agents; and external & internal auditors.
7. Financial Reporting
- i. Prepare quarterly financial reports and submit to PD and Bank in a timely fashion for review and approval.
 - ii. Ensure that annual financial statements and other reports as specified under the Financing Agreements and as per recommended/suggested by supervision missions are accurately prepared and timely submitted – annual financial statements to be prepared in accordance with Cash Basis IPSAS ‘Financial Reporting under Cash Basis of Accounting’.
 - iii. Prepare Annual financial statements of the three project/program and submit for review and approval to PD.
 - iv. Define and produce other financial reports, as and where required on utilization of funds to facilitate PD in decision-making process.
8. Audit
- i. Make arrangements for timely initiation and completion audit of project and ensure that report produced is in compliance with audit requirements of the Government and IFAD.
 - ii. Ensure that the project is adequately reflected in audit plan of Auditor General of Pakistan and that audit is periodically conducted.
 - iii. Cooperating with IFAD, Government, and other partners to improve project financial management, particularly in terms of following up the action points agreed in the project legal documents, during the IFAD supervision missions, Aide Memoires and the recommendations of external auditors and internal auditors.

- iv. Attend entry and exit meetings with external auditors, facilitate timely completion of audits by arranging timely submission of annual financial statement in appropriate format, supply of information and documents responding to queries, initiate actions for holding tripartite meetings and coordinating with relevant project entities in settling audit paras.
- v. Prepare working papers on audit observations raised by external auditors and arrange to convene Departmental Accounts Committee (DAC) meeting to settle the audit observations to the extent legally and logically possible.
- i.

3. Role of Finance and Admn Assistant (1 Position)

- i. Ensure compliance with internal control framework (Operations Manual, Financial Management Manual, SOPs and IFAD’s fiduciary guidelines etc.) and government rules and procedures while processing payments.
- ii. Analyze, plan, design, implement, and monitor a system to augment internal controls in line with best practices in the process of payment and expenditure management.
- iii. Apply pre-audit checks on all payments before payment from the assignment account(s) including budget availability, sanction of competent authority and compliance with applicable financial rules & regulations.
- iv. Ensure that No Objection is obtained from IFAD for every prior review activity before processing any payment.
- v. Ensure that only eligible payments are submitted to FM for seeking PD’s approval and drawing funds from the assignment account.
- vi. Manage financial aspects of the contracts under implementation, including payment terms, purchase orders and variation orders.
- vii. Record all transactions timely and accurately in the books of accounts (both in Pak Rupees and US\$) and ensure that no expenditure remained unaccounted.
- viii. Maintain accounts on cash basis as per government accounting procedure;
- ix. Maintain up-to-date maintenance of adequate registers, books of accounts and records in appropriate order and format to meet the government and donors’ requirements and to facilitate classification and analyzing the financial information for monitoring the projects progress.
- x. Prepare supplementary record which provides timely and up-to-date financial information of civil works and consultancies.
- xi. Maintain imprest of petty cash and ensure maintenance of separate petty cash book and petty cash vouchers and compliance with established procedures.
- xii. Verify vehicles log books & compare with the fuel consumption reports
- xiii. Tax Withholding on each payment
- xiv. Data entry into accounting software

- xv. Prepare monthly bank reconciliation statements of assignment account(s) both in Pak Rupee and US\$.
- xvi. Reconcile the expenditure on government prescribed format with Accountant General Office on monthly basis.
- xvii. Prepare and process monthly payroll and submit to Project Director for approval prior to making any payment under salaries. Ensure proper payroll controls are applied and the payments are made directly in the Bank accounts.
- xviii. Ensure that the fixed assets records are maintained for both the projects identifying location and user of each asset and arrange for the annual and periodical inventory of the assets and updating of the records.
- xix. Ensure safe custody of all financial records for review by Bank Missions, third party monitoring agents; and external & internal auditors.
- xx. Maintenance of filing system ensuring safekeeping of confidential material as per the guidelines given in this manual
- xxi. Custodian for management of office stationery supplies including maintenance of stock list of stationery and supplies and maintain log book.
- xxii. To maintain daily cash book & cash flow management.

4. Role of Finance and Admn Assistant (3 Positions—one each in the DCU)

- i. Manage accounts and record keeping of all interventions entrusted to DCUs including staff payrolls
- ii. Maintain liaison with service providers to ensure they are complying with internal controls/compliance requirements (set out in this manual later) stipulated in PMU's contract agreements with them.
- iii. Submit monthly report to PMU district level expenditures.
- iv.

5. Procurement and Contract Management

383. The project provides for one position each of Procurement Specialist and Contract Management Specialist. Detailed guidelines on public procurement and contract management under the SCRCP Project are provided in a separate Procurement Manual.

F. Annual Work Plan & Budgeting

384. Annual Work planning and budgeting is a key project activity since it allows the project to plan and manage its financial resources to support the implementation of its activities. It is important for the PMU in general and the finance team in particular to understand the country PFM system—inasmuch as it affects AWP/B of the SCRCP. Accordingly, a brief review of Pakistan's PFM system with its link to IFAD is provided before getting into AWP/B process for the SCRCP.

G. Pakistan's PFM system and its link with the SCRCP

385. The Planning Commission, Government of Pakistan is responsible for establishing criteria and guidelines—including templates for formulating development projects for federal and provincial

governments³². As per current arrangements, if the cost of a provincial development project exceeds PKR 10 billion, the P&DD of a province will have to seek the approval of the Executive Committee of the Economic Council (ECNEC) for that project. ECNEC is the highest forum to review and approve development projects in Pakistan. A well-defined process is in place for this purpose

- i. The Provincial Development Working Party (PDWP)—which is the clearing house of development project would review and recommend the project for consideration of the federal government;
- ii. The Central Development Working Party (CDWP)—housed in the Planning Commission, Islamabad, conducts financial and economic analysis of the projects and—the projects it finds well-designed, are recommended to ECNEC for review and approval;
- iii. ECNEC is the final approving authority for any provincial projects costing beyond 10 billion and all projects with foreign component.

386. The provincial government shall prepare project PC-1 for the ECNEC approval. The provincial P&DD is to prepare the PC-1 in compliance with applicable requirements and to engage with relevant government agencies to obtain approval of the PC-1 from the PDWP, the CDWP, and ECNEC. Any PC-1 document that is submitted with missing elements is not accepted by PDWP/CDWP/ECNEC. To avoid delays in the processing of the PC-1, the P&DD should start preparing the PC-1 based on the PDR. This is critical since any significant deviation(s) from the Project Design may require changing the PC-1 form which, in turn, could mean going through a long bureaucratic process.

H. Project design changes during project life

387. IFAD's projects are subject to performance reviews periodically. These reviews help in identifying what is working and what is not and taking remedial measure to ensure the project remain on track to achieving the intended outcomes of the project. While minor adjustments are carried out subsequent to each supervision mission, the Mid Term Review (MTR)—carried out when a project is almost halfway through implementation, is the time to revisit the whole design and make significant adjustments in the design—if such a response is warranted by implementation experience.

388. IFAD considers reallocations of funds between difference categories of expenditure to make the most of available resources. The purpose of these reallocations is to divert resources toward the activities that are contributing more effectively toward the intended project outcomes. The categories of expenditure where the project performance is not acceptable, it does not make sense to keep funds idle.

389. The current planning guidelines—applicable to the SCRPs require that in cases where the overall actual project cost does not go beyond 15% of the approved project cost, no revision in the PC-1 is required.

1. AWP/Budget Process

390. The budgeting process can be broken down in four steps:

- i. Preparation of the annual work plan
- ii. Preparation of the annual budget
- iii. Budget monitoring

³² Details about how to formulate project proposal are provided in the Manual for Development Project, Planning Commission available at <https://www.pc.gov.pk/uploads/downloads/perform/Manual-for-development-projects.pdf>

iv. Budget revisions.

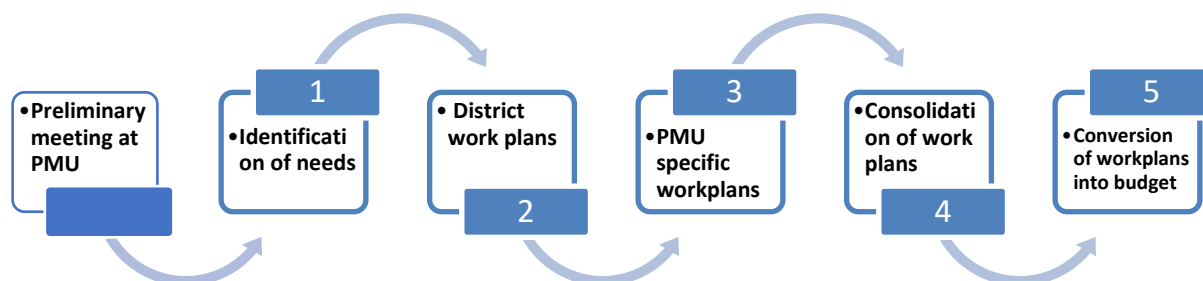
391. The annual work plan describes in detail all the activities that must be carried out by the Project during the year based on management priorities; it includes a chronogram for each activity, the verifiable indicator(s) and the staff/entities responsible for implementation. The annual budget, which is derived from the work plan, aims at providing detailed cost estimates for the implementation of project activities as well as the operation of the PMU and DCUs. These two parts of the Project planning process (the work plan and the budget) are brought together in a unique document called the annual work plan and budget (AWPB).

392. The AWPB is an essential management tool that serves to establish priorities for Project implementation, set out activities in a timeline, and forecast the resources (both financial and human) needed to achieve the set objectives. It is also required for the mobilization of funding by the various Project financiers. Finally, it represents the main tool for Project management, IFAD and the GoS to control costs and assess Project performance. The preparation of the AWPB is a participatory exercise involving the relevant line departments, implementing partners /service providers, and project beneficiaries. The Project Steering Committee and IFAD are responsible for the review and approval of the AWPB.

393. The AWPB covers the period from July to June each year, in line with the Project fiscal year. It integrates both IFAD's and GoS's planning processes.

2. Preparation of the Annual Work Plan

394. The annual work plan sets the Project objectives for the coming year, details activities to be conducted, specifies deliverables and outputs (along with key M&E indicators), as well as resources needed and implementation delays, and identifies institutional responsibilities. During the life of the Project, and particularly during the first year, the PDR and PC-1 serve as a framework for the preparation of the AWPB. The AWPB process will follow a sequential process as depicted in the flowchart.



Flow Chart 2: WPB process

395. Preliminary meeting. The preparation of the annual work plan starts with a preliminary meeting within the PMU, to which the heads of RCUs, and senior officials of line departments, and representatives of other implementing partners. The purpose of the meeting is to:

- i. Set the objectives of the Project for the coming year, for each district and overall
- ii. Establish priorities, taking into account the results obtained to date and the recommendations of supervision missions
- iii. Assess the achievements of the current AWPB so as to (i) take any necessary corrective measures and (ii) determine the activities that will not be completed in the current year and will need to be carried over to the year Y+1
- iv. Agree on the different steps and set the schedule for the preparation of the AWPB.

396. Identification of needs. Planning meetings with implementing partners shall be organized subsequently at DCUs level and all key stakeholders involved in project implementation in the districts shall participate in the deliberation. This exercise is coordinated by the DCUs' technical staff to ensure that the planning down to district levels is aligned with the project's objectives and priorities set during the AWPB preliminary meeting. The FM is in charge of identifying PMU/DCUs staff members' needs relating to financial management and administration, while the M&E Specialist is responsible for defining Project needs in terms of internal monitoring.

397. District work plans. The DCUs' M&E Officers under the supervision of M&E Specialist consolidate the district level plan in close coordination with the FM team and other implementing partners/service providers to ensure that the district plans are in line with the overall project objectives and the targets sets out in the preliminary meeting.

398. An AWPB workshop is then organized at district level, with the participation of technical staff from and DCUs and other IPs, in order to review the district work plan in detail. Other donor-funded projects in the area may be invited to participate so as to harmonize interventions and avoid duplication. During the workshop, the participants are invited to formulate observations on the draft district work plan, particularly regarding priority activities. The observations made during the workshop are taken into account by the DCUs M&E Officers to finalize the work plan, under the guidance of the M&E Specialist from PMU.

399. PMU Work Plan. At PMU level, each component head is responsible for drawing out a detailed list of activities to be conducted during the year (including activities to be carried over from the previous year). In addition to the technical activities to be implemented at PMU level, this also includes the M&E and KM and the finance & administration activities. This process is coordinated by the M&E Specialist to avoid duplication and to ensure overall coherence. Once the PMU work plan is drafted, the Project Director organizes a planning meeting at the PMU to discuss and finalize the document.

400. Consolidated work plan. The M&E Specialist is in charge of preparing a SCRCP consolidated work plan based on district work plan and the PMU work plan. Once the Project Director validates the finalized document, the FM and M&E Specialist work together on the codification of each work plan activity, using the accounting system's codification structure for AWPB activities. The next step is the preparation of the budget.

3. Preparation of the Annual Budget

401. Based on the finalized work plan, the IPs, DCUs and PMU technical staff are asked to estimate the cost of the various activities to be conducted. The estimation must consider all cost elements related to the activities, including mission's costs, consultant's fees, workshops, training, procurement, etc. The FM and Procurement Specialist may be consulted if necessary to assist in the costing of certain items. The sources, assumptions and calculation bases used for determining each cost estimate must be clearly documented in the budget.

1. The PMU operating budget is prepared by the FM which includes:

- i. Salaries, social security contributions, allowances, per diem and other personnel charges
- ii. Staff training costs
- iii. Procurement of goods, works and services for the PMU and DCUs offices
- iv. Office running costs (utilities, telephone, maintenance and repairs, supplies, fuel, vehicle costs, etc.)
- v. Other expenses (meetings, consultants' fees, audit fees, etc.)

402. The detailed cost estimates prepared by the technical staff for each Project component are forwarded to the FM who reviews them to ensure that:

- i. The costs estimate for each activity are reasonable;
- ii. The budget by activity, sub-component and component is coherent as compared to the annual cost estimates defined in the COSTAB and the GoS Annual Development Plan (ADP); and
- iii. Funds will be available in each expense category.

403. The FM then compiles the detailed budget data by component/sub-component and determines the funding source for each activity based on the allocation in the COSTAB. Funding sources for the SCRCP include the IFAD Loan, the GoS counterpart contribution, the beneficiaries' contribution and credit contribution from Banks against project provided subsidies. For the GoS counterpart funding, the budget must clearly distinguish between the funding related to duty & tax exemptions and other contributions. In-kind and cash contribution should be separately worked out.

404. The FM can then present the detailed budget worksheet by component/sub-component and by activity, with an indication of the funding source and the expense category for each activity. The budget worksheet includes separate sheets showing for each activity, the budget assumptions, the

sources and the calculation bases for the unit costs. This is essential in order to (i) facilitate budget monitoring and budget-actual variance analysis and (ii) prepare the budget in the following year(s).

405. The budget includes the following categories, in line with the eligible expense categories as detailed in the financing agreement:

- i. Vehicles & Motorcycles
- ii. Equipment and materials
- iii. Grants to Beneficiaries
- iv. Training and Studies
- v. Salaries & allowances
- vi. Operating Costs.

406. The budgets by component only include those expense categories relating to the activities to be conducted. It is essential for the FM to ensure that funds are available in each expense category to accommodate the cost estimates.

407. A budget conference is held at the PMU to discuss any necessary modifications to the budgets by component and by expense category, and to conduct budget arbitration between activities and/or components. The budget is finalized and consolidated by the FM on the basis of the decisions made during this conference.

408. The final step is the consolidation and formatting of the AWPB by the FM and the M&E Specialist. The main document covers the following:

- i. Physical progress made by the Project in the previous year (including quantitative data) and activities to be carried over to the coming year
- ii. Financial progress in the previous year, including cost overruns and savings
- iii. Procurement performance
- iv. Constraints and problems from the previous year, and recommendations to resolve them
- v. Lessons learned and rationale for the activities proposed
- vi. Main activities proposed for the current year, by component/sub-component
- vii. Consolidated budget.

409. The main document is complemented with annexes.

410. Detailed work plans and budgets by component/sub-component with an indication of the district;

- i. The procurement plan. A schedule showing, by expense category, the financing allocation (per the financing agreement), the cumulative disbursements to date, the current AWPB projections and the remaining balance. This schedule serves to demonstrate that sufficient funds are available in each expense category to cover for the budget projections.
- ii. The same schedule as above, by component and sub-component (the initial allocation is obtained from the PDR and COSTAB rather than the financing agreement); and.
- iii. The staff development plan.

411. After validation by the Project Director, the AWPB is forwarded to the head of the PSC who convenes a steering committee meeting for the review and approval of the document. The Project Director, and the PMU technical staff attend the meeting to answer questions from the PSC members. The AWPB is modified and finalized taking into account the observations from the PSC. The finalized version of the AWPB and Procurement Plan must be sent to the PSC and to IFAD for no objection. In the absence of comments from IFAD within 30 days after receipt, the AWPB shall be deemed approved. The approval of AWPB by PSC shall be deemed as the final approval for the GoS counterpart contribution.

412. A template for the AWPB is provided as **Annexure-12: Annual Work Plan/Budget Format** to this Manual. It will be customized to reflect all components, activities, and relation financial information.

4. Budget Monitoring

413. The AWPB serves as the reference document for the PMU to assess the Project physical and financial implementation progress. As soon as the AWPB is approved, the Finance Manager shall input the annual budget into the accounting system. The budget is entered by account, component, sub-component, AWPB activity, financier, expense category and district. After due diligence, the Finance Manager prints out the budget and distributes copies to the Project Director, the technical staff and the M&E section.

414. The finance section is responsible for monitoring the budget by comparing it with actual expenditures. Project expenses recorded in the general accounts are simultaneously recorded against the budget. Thanks to this unique data entry system, all Project expenses are automatically recorded in the “actual expense” column of the budget. The accounting system can generate budget-monitoring statements showing the status of the budget by component/sub-component, by activity, by expense category, by district and/or by financier for any period requested. These statements show the budgeted amount, the cumulative expenditures to date, the available balance and the percentage execution. The FM prints a budget-monitoring statement at the end of each month preferably or quarterly, or whenever necessary and distributes to the Project Director and other relevant component heads for comments or remedial actions—where required.

415. During the first week of each quarter, the Project Director shall a budget review meeting during which the FM, M&E Specialist, and Procurement Specialist shall analyze the budget-monitoring statement of the previous quarter.

416. This exercise may also be carried out monthly if deemed necessary by the SCRCP team to determine whether funds are being utilized as planned, and to take corrective actions if necessary. Any significant variance between the budget and actual expenses is investigated and discussed during the meeting. The FM then prepares a budget progress report explaining all variances and formulating recommendations, which may include the need for budget reallocation or revision. The quarterly budget-monitoring statement shall be attached to the report. This budget report shall serve as the source document for the AWPB execution section of the quarterly financial report prepared by the FM.

417. A template has been provided to assess technical and financial progress of the project against the approved AWP/B at **Annexure-13: Measuring Progress against the AWP/B**.

5. Budget Revision

418. The Project Director or Project team may decide to reallocate funds from one budget line or activity to another as long as the impact is less than 15% of the initial budget amount for that budget line. In this case s/he sends a memo instructing the FM to proceed with the reallocation. When the impact is up to 15% of the original line-item budget, a request a meeting will be held with relevant staff members and submit it for PSC approval. This exercise may be carried out at PMU through a formal meeting in which the component head (requesting the change) would argue for the change while PD,

FM and other technical lead—where necessary, would examine the proposal on merit. Once the proposed change is approved by the PD, it would be communicated to FM team to update the accounting system. If the changes are substantial and affecting the overall budget more than 15% shall be forwarded to the PSC’s head for his approval and subsequently will be forwarded to IFAD for NOC

419. In addition, depending on the project’s performance during the first half of the year (or due to unforeseen circumstances), it may become necessary to conduct a full revision of the budget for the rest of the year. The decision to carry out a budget revision is made by the Project Director and materialized in a memo sent to all concerned parties. The IPs, and technical PMU staff are requested to prepare a revised work plan and budget taking into account achievements/disbursements to date and detailing the activities that can be implemented before the end of the fiscal year. The consolidation, approval and recording process for the AWPB revision is the same as described above.

I. Flow of Funds

1. Financiers of the SCRCP and Flow Chart

420. The funding for the SCRCP comes from three sources (i) the IFAD Loan; (ii) the Counterpart Contribution from GoS—in cash and in kind and (iii) Beneficiaries’ Contributions. The total cost of the project is **USD 260 million** which includes the IFAD Loan (USD 100 million).

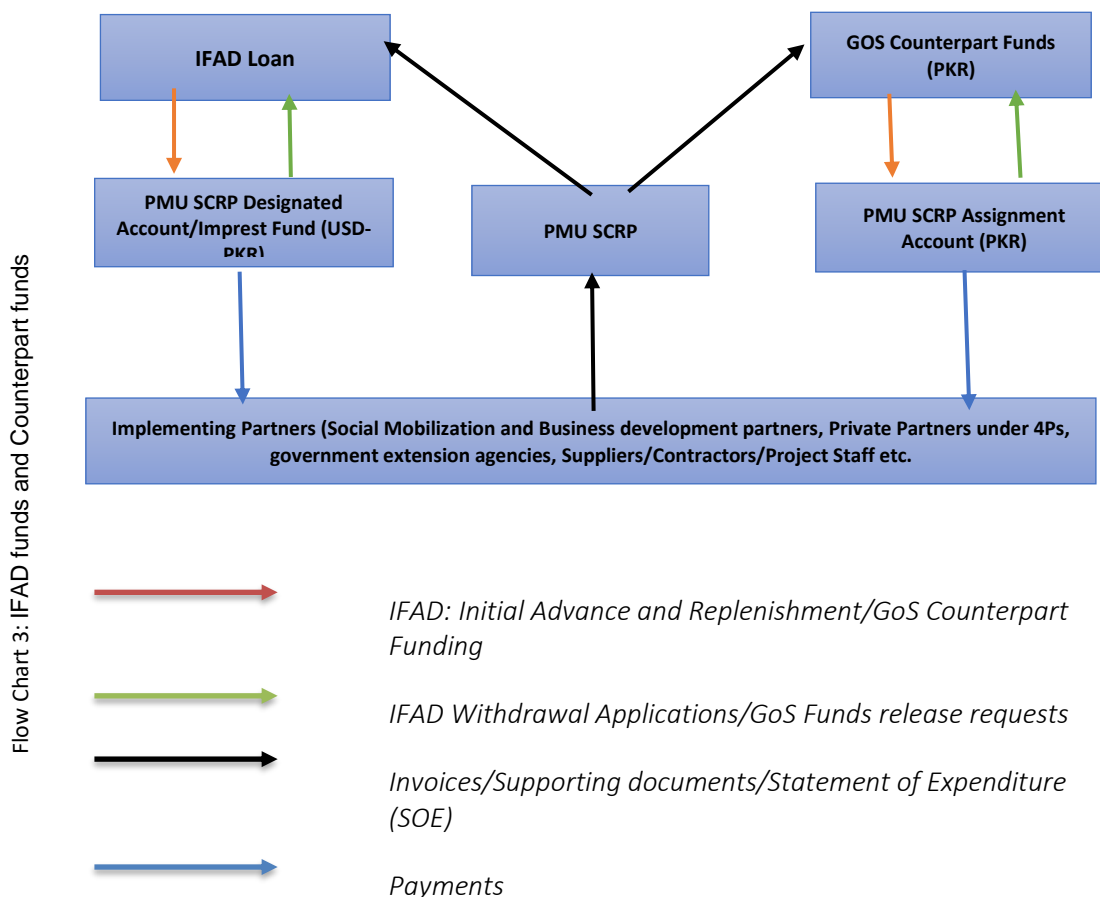
421. The project would access IFAD funds through the Imprest Fund methodology. PMU shall establish a Designated Account in the National Bank of Pakistan (NBP), Karachi to receive fund from IFAD as per established procedures. IFAD shall disburse an initial advance (Imprest Fund) to cover approximately six months of planned project expenditures to this Designated Account. The NBP shall make available to PMU equivalent amount in PKR for project expenditure through the same account. Further advances to the Designated Account will be made for the next reporting period based on the AWPB or expenditures forecast provided that at least 70% of the immediately preceding advance and 100% of all prior advances have been fully justified. The Designated Account shall show debits, credits and balance in PKR along with USD equivalent. PMU shall utilize the advance and replenish the account monthly or once the minimum expenditure limit as agreed with IFAD is met for submitting a withdrawal application. **Annexure-14:** Steps in the opening of Assignment Account/Designated Account provides details about how to open the Designated/Revolving Fund Account for the IFAD Loan.

422. The project shall use the Interim Financial Reports (IFRs) package to submit withdrawal applications to IFAD. Each quarter, PMU should submit the IFRs package to report on the financial performance and to justify the specified percentages of the withdrawn advances as indicated in the LTB. By justifying the required percentage of the withdrawn advances, the PMU will be eligible to withdraw further advances based on next period cash forecast.

423. IFRs package will mainly form the templates of the Withdrawal Application (WA) which will be submitted in ICP. The package should be sent to the IFAD’s Finance Officer concerned for clearance. Once the package is cleared by IFAD Finance Officer and the WA is submitted in ICP, the Financial Controller’s Division (FCD) will proceed with finalizing the WA in IFAD system. IFAD Finance Officer could select a sample of the expenditures included in the IFRs and request the supporting documents for further check. Detailed guidance on preparing IFR package is provided in Financial Reporting part and **Annexure-17:** Guidelines for Interim Financial Reporting of this PIM.

424. The GoS shall allocate counterpart funds through normal government budgetary process. The provincial government’s annual budget cycle starts usually in November/December with the issuance of a Budget Call Circular (BCC) that contains forms and guidance to formulate budget. PMU shall work out the requirements of counterpart funds and ensure that sufficient funds are provided in the budget to meet the project’s needs. PMU shall open a Designated Account for the counterpart funds and follow up with the government to ensure timely and sufficient release of funds for the project.

2. Details on Designated Accounts, Imprest Fund Procedures, and Recovery of Initial Advances given to the PMU are provided later in this section. The flowchart depicts how IFAD funds and Counterpart funds would flow through the project.



425. The PMU/DCUs shall conduct random inspection to check whether these stakeholders are in compliance with the applicable compliance requirements in the use of funds and the record of such inspection shall be properly maintained for IFAD’s missions. Details are provided in the section on Internal Controls later.

2. Evidence of authority to sign Withdrawal Applications

426. IFAD requires the B/R’s representative, as designated in the financing agreement, to furnish satisfactory evidence of the authority and authenticated specimen signatures of the individuals who will sign WAs on behalf of the borrower. This evidence must reach the Fund before the first WA is presented by the borrower and should be the original (photocopies, facsimiles or other means of transmission are not acceptable). Each WA should be signed by such duly authorized individuals, and the Fund must be notified of any change in the signatories authorized to withdraw funds from the loan. For this purpose, the B/R shall provide the names and specimen signatures of the newly appointed signatories and include the date when such change is to take effect. PMU shall use the following format for correspondence with IFAD on this issue.

EVIDENCE OF AUTHORITY TO SIGN WITHDRAWAL APPLICATIONS

(Sample letter – to be submitted on letterhead) [to include full street address, city, country]

International Fund for Agricultural Development (IFAD)
Paolo di Dono, 44
00142 Rome, Italy

Date: _____ Via

Attention: Finance Administration Services
Accounting and Controller's Division

Subject: **IFAD Loan/Grant/Financing No.:**
Project Name:

Dear Sirs/Madams:

I refer to the Financing Agreement between IFAD and [Name of Borrower/Recipient], dated []. In accordance with the provisions of Section 4.04(b) of IFAD's General Conditions for Agricultural Development Financing dated 29 April 2009 as may be amended from time to time, I hereby designate the following person (or persons) whose authenticated specimen signature(s) appear(s) below as authorized, on behalf of the Borrower/Recipient, to sign Applications for Withdrawal under the above-referenced IFAD Loan/Grant/Financing. This notification enters into effect as of [date -----]:

(Optional) The following is the official email address which will be used by the Borrower/Recipient to submit Applications for Withdrawal and other official communications to IFAD:

_____. Any communication not originating from this address should be disregarded.

(Name(s) and Title(s))

Specimen signature

(Name(s) and Title(s))

Specimen signature

(Name(s) and Title(s))

Specimen signature

(Indicate if the authorization to sign is jointly with another person(s)).

Signed by:

Title of the Borrower/Recipient's
Designated Representative
(as provided in the Financing Agreement)

3. Designated Account

427. The flow of funds for the Project starts with the opening of the project Designated Account (DA), denominated in US Dollars, in the National Bank of Pakistan (NBP), in accordance with the Funds requirements identified in the Financing Agreement and the Letter to the Borrower. The FM is responsible for opening and managing the Designated Account including receiving on a monthly basis the DA Statement of Account from the bank and reconciling it against PMU's records. Disbursements from the DA should be recorded in the PMU's account records as of the date they are made, that is when the checks are issued.

428. These funds can only be used for expenditures relating to the execution of the Project. PMU cannot make financial commitments or authorize disbursements over and above the funding made available to the Project. In the case of insufficient funds to conduct certain IFAD-financed Project activities, a request for reallocation of loan funds may be presented to IFAD through the EAD. The IFAD contribution comprises an IFAD loan of USD 100 million. The loan funds are made available to the Project in several instalments and using the Imprest Account modality³³.

³³ Details on different disbursement methods are available in the IFAD Financial and Administration Manual available at <https://www.ifad.org/en/document-detail/asset/39637251>

4. Imprest Account

429. The Imprest Account procedure is a disbursement procedure where IFAD makes an advance disbursement from the Loan Account for deposit to an Imprest Fund Account to be used exclusively for the IFAD's share of eligible expenditures. The main objective of this procedure is to help the borrower reduce cash flow difficulties in financing project expenditures, thereby facilitating project implementation. Other objectives are providing the borrower with more control over payments and reducing the number of withdrawal applications (WAs), particularly for payments for small expenditures and related costs.

- i. PMU opens a Designated Account denominated in the USD to receive funds as Imprest. A parallel account in PKR is also made operational to pay against project liabilities;
- ii. An initial deposit (or authorized allocation) amounting to the estimated expenditure for first six months of implementation will be drawn as an advance for the start-up phase once the project becomes effective at the request of EAD. The ceiling of the initial advance may be increased if it is not enough to meet project disbursement.
- iii. Periodic replenishments of the designated account corresponding to the reimbursement of eligible expenditures incurred by the Project throughout its implementation period.
- iv. The initial deposit would be recovered by deducting a portion of the replenishment amount requested in each withdrawal application submitted to IFAD towards the end of the implementation period.
- v. Direct payments by IFAD of expenditures incurred by the Project may be made at the request of PMU as provided in the LTB/FA.

430. The periodic replenishments will be made at the request of PMU (in the form of withdrawal applications), based on which IFAD withdraws funds from the loan account. The minimum withdrawal amount is normally set at 30% of the initial advance amount. In order to avoid cash flow problems, PMU is required to submit at least one withdrawal application (WA) to IFAD every quarter. When preparing the WAs, PMU shall follow the instructions contained in IFAD's LTB and Loan Disbursement Handbook (which also contains model documents and forms to use) and the procedures described below.

5. Recovery of Initial Advance

431. To avoid an excessive outstanding advance at the financial closing date, recovery of the advance is required ideally to begin six months before the Project Completion Date (PCD) where advances are large, and at the latest three months before the PCD where special circumstances may warrant this. Recovery of the advance may begin either: (i) six months before completion date; or (ii) when the undisbursed balance of the financing (including outstanding special commitments) is equal to twice the amount of the advance. Under Imprest Account modality, the Fund will effect a gradual recovery of the advance – normally by applying part of the amount documented in each replenishment application to reduce the outstanding advance. This offers the most effective means of ensuring that some funds remain available to finance eligible expenditures to be incurred using the imprest account.

432. A template to guide the finance team in recovering the initial advance is shown in the box on next page. Detailed guidance is provided in the IFAD Handbook on Disbursement.

Sample Recovery Plan-Designated Account

IFAD Loan No.:				IFAD Loan Amount (SDR)		20 000 000.00		
Project Completion Date:		31-Dec-12		Loan Closing Date:		30-Jun-13		
Reporting Period	WA No.	Date	US \$	EUR	SDR	Unjustified balance USD SD R		
Authorized Allocation	1	18/01/2006	\$ 250 000.00	€ -	172 648.51	0.00	(77 351.49)	
				€ -	172 648.51			
				0.00	#VALUE!			
			Exchange Rate:					
Justification:								
Ref. No.	WA No.	Date	Estimated WA value (SP)	Estimated WA value (USD)	Proposed Recovery %	Recovery Amount (USD)	Commulative Recovery Amount (USD)	Commulative Unjustified balance (USD)
1	40	21-Feb-12		111 832.56	45%	50 324.65	50 324.65	(50 324.65)
2	41	3-Mar-12		72 685.11	35%	25 439.79	75 764.44	(75 764.44)
3	42	5-May-12		74 685.11	35%	26 139.79	101 904.23	(101 904.23)
4	43	7-Jul-12		70 885.11	42%	29 771.75	131 675.98	(131 675.98)
5	44	5-Sep-12		64 885.11	40%	25 954.04	157 630.02	(157 630.02)
6	45	31-Dec-12		82 627.66	80%	66 102.13	223 732.15	(223 732.15)
7	46	10-Jun-13		26 065.11	100 %	26 267.85	250 000.00	(250 000.00)
8								
				TOTAL	503 665.77 USD	250 000.00 USD		
<p>In accordance with IFAD procedures, any amount unjustified at the time of loan closing date will be promptly refunded to IFAD.</p>								
Prepared by:						15-Oct-11		
						Date		
Confirmed by:								
						Date		

6. Direct Payment Procedures

433. The direct payment procedure is a disbursement procedure where IFAD, at the borrower's request, pays a designated beneficiary (e.g., supplier, contractor, or consultant) directly.

434. A signed withdrawal application (WA) must be submitted to IFAD together with a summary sheet and the required supporting documents. PMU shall use the standardized form for estimating its funding needs and prepare a WA for direct payments where necessary. To prove the requested disbursement is for eligible project expenditures incurred, the PMU has to provide following supporting documents with every withdrawal application that it submits to IFAD:

Table 10: Requirement of supporting documents with withdrawal application

Payment for	Payment type	Required supporting documents
Goods	One time or Instalment payment	Supplier’s invoice, or purchase order (indicating date, amount, and bank account details)
Services	Advance Payment	Consultant’s or service provider’s invoice (indicating amount of advance payment and bank account details)
	Progress Payment	Consultant’s or service provider’s invoice (indicating date, amount, and bank account details)
Civil Works	Advance Payment	Contractor’s invoice (indicating date, amount, and bank account details)
	Progress Payment	Contractor’s invoice and interim payment certificate or summary of work progress (indicating period covered, amount, and bank account details)
	Release of Retention Money	Contractor’s invoice (indicating date, amount, and bank account details) and unconditional bank guarantee

7. Statement of Expenditure (SOE) Procedure

435. For any expenditure item costing less than (to be inserted later based on FA) PMU can use this procedure for replenishment of its imprest fund. The statement of expenditures (SOE) procedure is a simplified procedure requiring no submission of supporting documentation of expenditures. The procedure derives its name from the SOE form which is submitted with the WA. The SOE replaces the usual supporting documents and the summary sheet. The SOE form provides data on contracts and disbursements of individual payments (up to any applicable SOE ceiling). During IFAD’s supervision mission, the FM Specialist shall conduct a review of sample transactions for compliance with all applicable requirements. PMU is required to maintain complete supporting documentation for SOEs for this purpose.

436. While using this method, PMU certifies that (a) expenditures have been incurred and paid for proper execution of project activities under the terms and conditions of the loan agreement; (b) all documentation authenticating these expenditures has been retained and will be made available for examination by PMU upon request; and (c) for projects with an SOE ceiling, payments have not been split to enable them to pass through such ceiling.

437. PMU shall use a standardized form (Summary/Statement of Expenditure Sheet) prescribed by IFAD for preparing claims for withdrawal of funds for the project.

8. Preparation of Withdrawal Applications

438. The WA is a standard IFAD package comprising several forms and documents, which are all described in detail in the LTB and IFAD Loan Disbursement Handbook:

- Form 100 – the application for withdrawal, which indicates the amount of replenishment requested in the WA currency and the payment instructions. It contains the signatures of the authorized representatives (mostly PD, and FM)
- Summary sheet – the recap schedule showing the amounts claimed (in local currency and in the WA currency) by expense category under Forms 101 and 102
- Form 101 sheets – used for expenditure exceeding the SOE threshold or for the Direct Payment procedure (see below). Copies of supporting documents must be attached to the Form 101 sheets and sent to IFAD. In order to facilitate processing by IFAD, the item numbers on the

summary sheets are cross-referenced to the supporting documents. In addition, the IFAD no objection date is included in the “Remarks” column, if applicable.

- Form 102 sheets – used to detail all expenditure claimed under the SOE procedure (all expenditure under USD 50,000), for which no supporting documentation is sent to IFAD. The relevant supporting documents must be retained instead by the PMU for periodic inspection by representatives of IFAD during supervision missions, and by the auditors as part of the annual audits. It should be noted that the SOE threshold applies to the value of the contract rather than the amount of the payment. Form 102 sheets must be separated by expense category, and certified by the FM and the Project Director as authorized signatories.
- Form 104 – the designated account reconciliation, which serves to reconstitute the IFAD advances from bank balances, WAs in process and unclaimed disbursements. Any difference between the outstanding IFAD advance and the total accounted for must be justified and cleared as soon as possible.
- Form 105 – the WA checklist must be completed to make sure that the WA was properly completed in accordance with IFAD instructions.

439. In addition, PMU is required to submit with each WA, an updated contract register and contract-monitoring forms (for all contracts with more than one payment).

440. The production of the WAs should preferably be automated in Accounting Software. At least at the end of each quarter (following month-end verification procedures detailed in Section 1.4), the Finance Manager launches the preparation of a WA, which necessitates three steps:

- i. Preliminary verifications. The check stubs and bank transfers for the month are checked against the bank journal to ensure that all disbursements have been recorded in the Accounting Software and are supported by proper documentation. The bank journal is reviewed in detail to ensure that the description of the transactions posted in the system are sufficiently clear and complete. Finally, the Deputy Finance Manager ensures that bank reconciliations have been completed for all accounts.
- ii. Accounting system processing. The accounting system is set up so as to exclude advances from the amounts claimed for reimbursement in the WA. The FM selects the financing under which the WA is prepared, the period covered by the WA, and enters the SOE threshold (to be inserted as stipulated in the LTB/FA) and the month-end exchange rate. The system then shows all ‘claimable’ disbursements since the previous WA issued.

441. WA printing: Once the processing is complete, the WA number and period are automatically generated by the system, and the WA forms 100, 101, 102, and 104, as well as the summary sheet, can then be printed.

442. The FM makes copies of all supporting documents backing up the WA and cross-references them to the summary sheets. Copies of the bank statements for the corresponding months are also attached to the WA. After having checked the WA to ensure that the references, amounts, and other details are correct, the FM fills out PMU’s checklist to ensure that all steps have been properly followed. The FM also verifies the WA, signs the relevant forms and completes both the PMU’s and the WA’s checklists. S/he then forwards the entire package to the PD for review and approval. The WA checklist (form 105) is verified by the PD as s/he performs a final check on the WA prior to signing it. Before sending/submitting the WA to IFAD, the FM scans and makes a copy of the entire signed WA package for PMU records. Withdrawal applications are sent to IFAD along with all supporting documents through the online WA submission portal and it is duly verified by FM & PD.

443. IFAD financing proceeds may also be obtained through direct payments. This procedure is used for eligible Project expenditures to be paid directly by IFAD to suppliers, contractors, consultants, or third parties as authorized by the Borrower. The direct payment procedure may be used to request the

payment of one or several invoices (totalling more than the minimum amount as stipulated in the LTB/FA), but to the same supplier/contractor. The Direct Payment package includes Forms 100 and 101 described above.

444. Once the payment is processed, IFAD sends a payment advice to the EAD (with a copy to the PMU), including the value date of the payment, the amount and currency of the payment, the SDR equivalent of the WA and the categories charged. The FM uses this information to fill out the monitoring schedule for WA and IFAD reimbursements. This schedule allows the FM to monitor the payment delays, and the differences between the amounts of the WA submitted and the amounts paid by IFAD, if any. In addition, at the end of each month, the FM requests the status of funds by category from IFAD and reconciles it with the PMU accounts. Any difference must be investigated and explained as soon as possible.

Annexure-15: Checklist for reviewing withdrawal applications *indicates the checks that the finance team is required to apply while preparing withdrawal applications.*

Introduction to IFAD's Loan Disbursement Handbook

The effectiveness of the finance team to manage project funds depends on its understanding of the Imprest Fund procedures and the ability to use withdrawal application formats and proper documentation to draw on IFAD's funds. The finance team will prepare withdrawal applications frequently, carry out monthly reconciliation of the designated accounts with the NBP, and prepare disbursement reports etc. The finance team should consult IFAD Handbook for Disbursement—in addition to what is explained in this manual to ensure that it complies with IFAD's relevant instruction in its work.

This Loan Disbursement Handbook is intended to familiarize both borrowers and recipients with the procedures for withdrawing proceeds of loans/grants/financing provided by and through the International Fund for Agricultural Development, when financing is to be administered and the project supervised by the Fund.

The Loan Disbursement Handbook is available at <https://www.ifad.org/en/document-detail/asset/39635782>

9. Counterpart Funds

445. The share of government in project financing is estimated at (USD 9.1 million). This comprises contribution for payment of taxes and project management costs. The funds shall be made available through the project's Assignment Account established for this purpose. At the beginning of each quarter, the FM prepares a funds request letter for 25% of the annual amount earmarked in the approved AWPB and PSDP. The letter is signed by the PD and sent to the Chairman, P&DD. When the funds requested are released, the PMU receives a confirmation letter from the Accountant General Sindh Office, which is responsible for maintaining the SCRCP's assignment account in which counterpart funds are held.

10. Beneficiaries' Contributions

446. PMU is required to maintain updated information on the beneficiaries' contribution to the project in its accounting system. This is critical to ensuring that all relevant project investment is properly accounted for and reported in the project financial statements. To ensure the authenticity of the beneficiaries' contribution—reported by IPs and others as the case may be, PMU will carry out periodic review of the primary data sources used in reporting by the beneficiaries.

J. Disbursement Process

1. Classes of expenditure

447. The SCRCP incurs two types of expenses: administrative expenses (relating to the operation of the PMU and DCUs) and project expenses (relating to the implementation of Project activities). The eligible expense categories for the Project are in accordance with the financing agreement. For certain categories. The financing agreement specifies the total amount allocated for each of the categories, and the percentage of the expenses that is financed by IFAD.

448. In order to facilitate the management of Project resources and corresponding actions, annual expenditure plans are prepared from the AWPB for the 3 main classes of expenditure incurred by the SCRCP:

- i. The procurement plan, prepared by the Procurement Specialist, details the goods, works and services to be acquired for the Project in the following 12 months; it includes quantities, estimated costs and the anticipated acquisition date;
- ii. The intervention plan, prepared by the PMU technical staff in coordination with the IPs which includes all project interventions to be implemented during the following 12 months;
- iii. The annual personnel plan prepared by the Admin & HR at PMU and DCUs, shows the core posts, temporary personnel and individual consultants to be engaged in the coming year. For each post or assignment, the anticipated dates and duration, the type of contract and the estimated cost are specified.

449. Each of these plans identifies the component and AWPB activity corresponding to the expenditure forecasted. Once they are approved by the Project Director, these plans are distributed to the finance and administrative team for implementation.

2. Expenditure Request and Authorization

450. All Project expenditures are initiated by a request prepared/signed by the requesting staff and indicating the nature of the expenditure and other relevant information, the amount, AWPB activity, and the transaction coding. Expenditure requests may take the form of a purchase requisition (for the procurement of goods, works or services), an activity request (for the organization of workshops, training or demos sessions, meetings, or other activities directly implemented by Project staff), a request for temporary assistance (for the engagement of temporary personnel or individual consultants), the monthly payroll statement (for the salaries of Project staff) or a travel authorization (for official missions).

451. Requests are first sent to the FM who verifies that (i) the expenditure is included in the appropriate annual plan and the AWPB and (ii) funds are available, before forwarding it to the Project Director for approval. The request is only approved by the Project Director if the relevance of the expenditure and the availability of funds have been established. Project funds cannot be committed unless the request has been signed by the FM and approved by the Project Director. Once the request is approved, the expenditure process is launched via a procurement action, an advance, a recruitment action or a travel authorization.

452. At the DCUs level, the requests (usually from technical staff) are sent to the Accounts Officer who send it to PMU Finance section for signature of FM and approval of Project Director. No expenditure may be approved if it exceeds the amount budgeted, unless there is prior written approval from the Project Director.

3. Payment Request

453. Payment requests may take different forms, depending on the type of expenditure: it can be an invoice or progress payment request (for the procurement of goods, works or services), a fee payment request (for temporary personnel or individual consultant's services), an advance request (for workshops or meetings), or a travel expense claim (for official travel).

454. For invoices (or progress payment requests), suppliers/contractors are requested to attach a copy of the contract or purchase order and the delivery slip or statement of acceptance of work (or certificate of completion of work) when submitting an invoice for payment. After receiving invoices by the relevant section, invoices are sent to the Finance Manager who:

- i. Verifies the mathematical accuracy of the invoice;
- ii. Ensures that the "pack" is complete (invoice, purchase requisition, contract or purchase order, delivery slip/statement of acceptance of works/certificate of completion, etc.) and checks that the information is the same on all the supporting documents;
- iii. In the case of progress payment request for infrastructure, verifies that the contractor's request matches the approved measurement book maintained by the Project;
- iv. Ensures that the invoice was not previously paid (by checking in the Accounting Software and the contract monitoring form);
- v. Updates the contract monitoring form.

455. For fee payment requests, consultants are requested to attach their reports. The payment request is logged in by Accounts Officers at the DCUs and sent to Finance Manager who:

- i. Verifies the mathematical accuracy of the request;
- ii. Prepares the payment pack (payment request, request for temporary assistance, contract, copy of report if applicable) and checks that the information is the same on all the documents;
- iii. Ensures acceptance of the report by the project, if applicable
- iv. Ensures that the fee payment request was not previously paid (by checking in Accounting Software).

456. For advance requests, the Finance Manager verifies that:

- v. The cash advance request is duly approved by the FM and the Project Director, and
- vi. All supporting documents are attached (approved TOR, activity request and budget).

457. For the travel claims, the FM verifies:

- i. The approval of the FM and the Project Director.
- ii. The completeness of supporting documents justifying the expenses claimed (including the travel authorization with proof of travel).
- iii. The accuracy of computation of mission costs by the traveler (compared to the travel authorization).

458. The above verifications are materialized on the transaction voucher used for inputting the payment in the accounting system. In case of an error or omission on any of the payment documents, the Finance Manager returns the document to the supplier, consultant or Project staff member for them to be corrected and re-issued. Once the verification is complete, the Finance Manager sends the payment request (invoice or fee payment request) to the originator of the expenditure (i.e. the requesting staff) for certification. The originator of the expenditure must sign the invoice or payment request to certify the goods have been delivered, works completed or services rendered in accordance

with the contract or purchase order. Invoices must be marked “goods delivered” or “services rendered” followed by the date, to indicate that they have been certified for payment. All invoices or payment requests must also bear the Project Director’s signature (for payment approval) before payment can be processed.

K. Accounting Procedures

1. Accounting Rules and Principles

459. The accounting method used for the SCRCP is the cash basis of accounting; financial statements therefore only reflect cash receipts and cash disbursements. Consequently, fixed assets are expensed at the time of purchase. Financial commitments at the end of the year are shown as footnotes to the financial statements. The SCRCP uses double-entry accounting, in accordance with generally accepted international accounting principles.

460. Generally accepted accounting principles are the foundation upon which the SCRCP’s financial information system is built and which (i) determine the methods of evaluation and recording of financial transactions and (ii) guarantee the quality of the financial statements. The main principles are:

- i. Consistency in accounting principles and methods used from one year to the next
- ii. Going concern (up to the Project completion date)
- iii. Matching revenues and expenses within the same fiscal year
- iv. Historical cost basis for recording financial transactions
- v. Non-offsetting of assets and liabilities or revenues and expenses
- vi. Conservatism, regularity and fairness of accounts and financial statements
- vii. Materiality (full disclosure of material information/data and omission of immaterial information/data in the financial statements).

461. The Project does not generate revenues; instead it receives subsidies from donors in order to finance its activities. Due to the nature of these activities, the Project must follow the principle of balance between expenses and subsidies. In order for the net result at the end of each fiscal year to be nil, a balance must be stricken between:

- Investment subsidies and expenditures (i.e. acquisition of capital assets), and
- Operating subsidies and expenditures (i.e. expenditures relating to Project activities).

462. Project accounts are maintained in Pakistan rupee (PKR); however, in order to facilitate financial monitoring on the part of IFAD, financial reports are also presented in USD or SDR. The Project fiscal year goes from July 1st to June 30th.

2. Accounting Software/Financial Information System

463. The Project shall use an accounting software for recording transactions in the financial, analytical and budgetary accounts, as well as for the production of various financial and accounting reports (accounting journals, trial balance, general ledger, etc.). A suitable accounting software shall be procured to help the project comply with the reporting requirements of IFAD while also meeting its financial management needs. At minimum, the accounting software needs to have following functionalities:

- i. General chart of accounts (for actual and budget transactions)
- ii. Analytical/cost accounting codes

- iii. Currencies used for Project’s financial reporting (PKR, US dollars and SDR)
 - iv. Journals (purchase, bank, direct payment, subsidiary ledgers, etc.)
 - v. Suppliers
 - vi. Other third parties (banks, government, etc.)
 - vii. Balance sheet, income statement and statement of sources and uses of funds.
464. The software is used to input transactions in the accounts, to process transactions, to view movements, transactions coding and balances on the screen, to make inquiries, and to consult accounts and journals. The system also allows for reporting and printing journals, ledgers and trial balances using different criteria.

3. Recording of Transactions

465. SCRCP financial transactions shall be recorded in the project accounts using the accounting software. The recording of transactions is completed in four steps:

- i. Preparation of a transaction voucher
- ii. Input of the transaction in the appropriate subsidiary ledger
- iii. Back-up of accounting records
- iv. Filing of accounting records.

4. Transaction Voucher (or bill form)

466. Accounts Officer at PMU/Accounts Officers at RCU shall prepare the transaction voucher. The voucher must be backed up by a supporting document approved by the authorized officer. The supporting document can be an invoice, a progress payment request for works, fee payment request, advance request, travel expense claim, payroll statement, check or bank transfer, bank debit or credit advice, or an adjusting entry sheet. The transaction voucher serves two purposes

- i. It materializes the preliminary verifications carried out by on the supporting documents;
- ii. It serves as the support for inputting transactions into the accounting system.

467. The voucher number is obtained from the input screen, as entries are being input into the system. The numbering sequence used for the vouchers is therefore the same as the one generated automatically by the Accounting Software.

468. The following information is indicated on the voucher:

- i. Journal
- ii. Nature, date, description and amount of the transaction in PKR
- iii. Name of recipient (supplier, consultant, etc.)
- iv. Reference of the supporting document
- v. Amount of income tax and VAT
- vi. IFAD and GoS share
- vii. Exchange rate
- viii. Coding for general accounts, analytical accounts, budgetary accounts and PC-1 code. The coding of transactions for general accounts, analytical accounts, budgetary accounts and PC-1 code are based on the Accounting Software’s

charts of accounts—which are consistent with the chart of account prescribed by the federal government. The AWPB activity, the district, the source of funding and the expense category are also indicated on the voucher.

469. At PMU level, once the voucher is filled out, it is signed by the Accounts Officer, and verified and signed by the FM. In the case of a payment, the Project Director also approves the voucher. Similarly, at DCUs, Accounts Officers prepare the vouchers and verified by the head of the DCU before being submitted to PD.

5. Input of Transactions

470. Transactions are input into Accounting Software using a “transaction entry” window. The journal entry number generated automatically by the system is noted on the voucher. Using the information on the voucher, the transaction type and date, source document code and reference, currency, account numbers and transaction amount are entered into the system by the Accounts Officer for each transaction.

471. The inputting of transactions takes place on a daily basis for the vouchers that have been checked by the FM as the case may be and approved by the Project Director. Transactions entered into the system are directly posted into the Project’s general ledger.

6. Backup of Accounting Records

472. Once posted, transactions can only be modified or deleted by inputting a correcting or adjusting entry in the system. At the end of each day, all the data input into the system is backed up automatically to the server. In addition, FM are responsible to backs up the accounting data on an external device at the end of each week; this weekly backup on external device is kept by the FM/PD. These backups allow for restoring of posted transactions in case of power failure, errors on the data or any other problem.

7. Filing of Accounting Records

473. The Accounts Officer at PMU is responsible for printing the journals and other accounting reports, and for filing all accounting records. The original accounting records are filed as a package composed of the voucher and the corresponding supporting documents. They are filed in chronological order by transaction type (one or more separate file(s) for each month). The accounting records are grouped on a monthly basis with a separate binder for each of the following transaction journals:

- i. Purchases
- ii. Payroll
- iii. Subsidies
- iv. Bank – Designated Account
- v. Bank – Project Account
- vi. Direct payment (if any)
- vii. Correcting/adjusting entries.

474. Reports may be printed as and when needed by the FM staff. Two complete sets of accounting reports are printed as part of the monthly and annual closing of accounts, after all transactions have been posted, verifications carried out and adjustments recorded (one for the FM and one for the files). These printouts are stamped with a stamp marked “Final” to indicate that this is the last version.

8. Monthly and Annual Closing of Accounts

475. SCRCP accounts shall be verified at the end of each month and closed at the end of the fiscal year. The objective of the accounts verification and closing procedures is to provide the users of financial information with an accurate and reliable accounting and financial situation, as well as to meet the Project's legal obligations. Because the monthly financial and accounting reports are for internal use only, the monthly verification exercise is more limited in scope than the annual closing of accounts.

9. Monthly Verification of Accounts

476. Project accounts are closed at the end of each month in order to provide the Finance Unit and Project Management with:

- i. A complete and accurate cash and disbursements situation, for proper monitoring;
- ii. Accurate and up-to-date accounting and financial data for the preparation of the monthly financial report, the quarterly IFRs and the withdrawal applications.

3. Monthly verification procedures are carried out by the FM during the first 10 days of the following month and include:

- i. Review and validation of financial reporting packages;
- ii. Posting of outstanding transactions;
- iii. Checking of accounting records against journals and payment documents (check stubs, bank transfers); to verify the completeness of transaction entry and the accuracy of transaction coding (for general, analytical and budgetary accounts);
- iv. Reconciliation of the IFAD status of funds statement with the Project accounts (for cumulative disbursements to date by expense category);
- v. Bank reconciliations;
- vi. Designated Account reconciliation;
- vii. Reconciliation of the financial commitments schedule (generated from Accounting Software) with the individual contract monitoring forms and the contract register; and
- viii. Physical inventory of supplies.

10. Annual Closing of Accounts

477. The main objective of the annual closing of accounts is the preparation of the year- end financial statements, in accordance with the financing agreement and national regulations. Annual closing procedures start at the beginning of June each year and must be completed prior to the end of August of the following fiscal year, so that year-end financial statements may be presented to the PSC and IFAD at the latest on 31st August.

478. The FM prepares an annual closing schedule and communicates it to all Project staff by 30th of June. This schedule lists the different steps of the closing process and indicates deadlines and responsible staff. It contains:

- i. Deadlines for carrying out certain tasks (processing of travel authorizations and travel expense claims, processing of purchase requisitions and requests for temporary assistance, payment of suppliers, etc.);

- ii. Instructions for the year-end inventories (fixed assets and supplies);
- iii. Instructions for the closing of accounts;
- iv. List of documents to obtain or prepare for the annual closing;
- v. List of documents to prepare for the external auditors; and
- vi. Deadlines for the production of reports, statements and other accounting and financial information.

479. The annual closing procedures are carried out by the FM, with assistance from DCUs, as needed, and include:

- i. Collection and review of financial reporting packages;
- ii. Posting of outstanding transactions;
- iii. Checking of accounting records against journals and payment documents for the month of June;
- iv. Analysis and justification of balances for each general and auxiliary account (this procedure is preceded by the printing of ledgers and balances);
- v. Determination of estimates for accrual and deferral transactions (for inclusion in the footnotes to the financial statements);
- vi. Input of correcting and adjusting entries;
- vii. Reconciliation of the IFAD status of funds statement with the Project accounts (for cumulative disbursements to date) by expense category;
- viii. Bank reconciliation;
- ix. Designated Accounts reconciliation;
- x. Reconciliation of the financial commitments schedule (generated from Accounting Software) with the contract monitoring forms and the contract register;
- xi. Physical inventory of fixed assets; and
- xii. Physical inventory of supplies.

L. Maintenance of separate accounts and records

480. In terms of IFAD’s General Conditions for Agricultural Finance: “The Project Parties shall maintain separate accounts and records in accordance with consistently maintained appropriate accounting practices adequate to reflect the operations, resources and expenditures related to the Project until the Financing Closing Date...”

481. In order to comply with the above requirement, PMU and other implementing agencies are required to maintain accounts. Such accounts and records may include:

Table 11: Types of Accounts required at PMU and IPs level

Type	Example
<i>Electronic information</i>	<ul style="list-style-type: none"> • Data and information maintained within the accounting software • Other documents and files maintained electronically, either on desktops, laptops or removable storage devices
<i>Correspondence</i>	<ul style="list-style-type: none"> • Emails

	<ul style="list-style-type: none"> • Hard copy correspondence (letters)
<i>Documents received from external sources</i>	<ul style="list-style-type: none"> • Bank statements • Supplier documentation
<i>Internally generated information</i>	<ul style="list-style-type: none"> • Employee files • Withdrawal applications • Forms

482. All documents and information are the property of the SCRCP and may not be removed.

1. Filing and storage of the financial records

483. PMU and other implementing agencies are responsible for filing records. To fulfil this responsibility:

- i. Project parties should maintain files in a chronological order, assigning appropriate codes/sequential numbers;
- ii. Project parties should perform filing activities on a regular basis to prevent the accumulation of papers and to ensure that the financial records are always maintained in an up-to-date manner;
- iii. Project parties should allocate an appropriate storage area for the financial records in paper format and maintain them in locked cabinets, safe from water and fire, to which access is controlled and limited; and
- iv. Project parties should also classify the financial records as "Confidential", or "General".

2. Off-site archiving of financial records

484. The respective Financial Managers should ensure that the financial records are archived at an off-site location on a regularly basis. Once a year, the Financial Managers should make sure that the completed or inactive files are archived in a manner that will allow for easy retrieval of the files in case they are required at some future date.

3. Electronic back-up procedures

485. Back-up of electronic information is an important function to be undertaken under instruction from the Financial Manager. It is required that:

- i. Daily: Electronic information at each Project office is backed up on the local server
- ii. Weekly: Electronic information is saved on an external storage device and kept in a locked cabinet

486. Project staff access to backup files are subject to authorisation by the Project director or Financial Manager. The access of external persons is prohibited except for the auditors and IFAD staff.

4. Retention period

487. Project parties are required to retain accounts and records for at least ten (10) years after Financial Close. The Financial Manager should ensure that all documents and records (electronic and paper) are handed over to GoS at financial closure to ensure that records can be maintained for the 10-year period.

5. Fixed Asset Management

488. Fixed asset management is an important process that seeks to track fixed assets for the purposes of financial accounting and to ensure preventive maintenance, and theft deterrence. Adequate Fixed asset maintenance also increases the sustainability of the Project. There are three elements in fixed asset management that require the attention of the Financial Managers:

1. Purchase of equipment
 - i. Setting up and maintaining an asset register including verification
 - ii. Setting up a plan for disposal and/or handover of the asset once the Project is completed
2. Purchase of Equipment

489. The FM team should follow the following process for each fixed asset purchased:

- i. Assign a unique, sequential asset number (excluding minor items such as stationary).
- ii. Tag each item with its unique asset number.
- iii. Record the item of equipment in fixed asset register

3. Fixed Asset Register

490. The FM team must maintain a fixed asset register in the asset management module of the accounting software. The asset register should record the following information for each individual piece of equipment:

- i. Asset description
- ii. Asset number
- iii. Individual responsible for asset
- iv. Implementing agency responsible for purchase
- v. Source of funding of asset (IFAD, government etc.),
- vi. Location of the asset
- vii. Date of purchase
- viii. Cost of purchase and invoice number
- ix. Remarks regarding the condition of the asset

491. The FM shall ensure that the consolidated fixed asset register is maintained and updated regularly. Assets purchased for beneficiary use should be included in the fixed asset register if the assets remain under the ownership of the Project (therefore beneficiaries to return to Project at Project closure).

4. Asset Verification Review

492. Under the management of FM, the SCRCP must conduct an annual asset verification process whereby the following checks are performed:

- i. Verify that all fixed assets are still held in the location recorded on the register;
- ii. Confirm the completeness and accuracy of the information recorded on the fixed asset register;

- iii. Check that equipment and vehicles are still in a reasonable state of repair and that remarks regarding the condition of the assets are correct as recorded in the fixed asset register;

493. The verification review must be performed by different staff from those who use the equipment, to ensure adequate segregation of duty. Discrepancies between the verification exercise and the fixed asset register should be investigated. Where assets are missing or seriously damaged, they should be removed from the asset register. The removal should be formally documented and approved by Financial Manager and Project Director. Moreover, the Financial Manager will undertake random verification of fixed assets during field visit.

6. Vehicle Maintenance and Fuel

494. Following general guidelines should be followed.

- i. Drivers are required to maintain waybills/itinerary lists and vehicle history records.
- ii. No cash shall be advanced to drivers for the purposes of refueling.
- iii. Each vehicle to have dedicated fuel card which indicate the vehicle registration number.
- iv. Each fuel card to have a set daily / monthly limit based on average consumption.
- v. Changes to the monthly limit is subject to approval by the Financial Manager (which will be approved base on approved trips).
- vi. The waybill shall indicate the reading of odometer at the beginning and end of the period, i.e. the mileage of the car, as well as fuel consumption. This process shall be checked by an accountant based on GPS system ("Teltonika FM 4200) in the data server of "Realcom" LLC, which is set in each vehicle of PMU. Using the device, one can track the route, stop time, kilometers traveled, etc. The data shall be entered into the accounting software which distributes fuel by projects, depending on whether one or the other trip was made on any project. (Manual recording / monitoring at PMU is acceptable given limited number of vehicle
- vii. Fuel stations shall provide a monthly summary report on fueling and invoice which the accountant shall compare to the fuel invoices attached to the waybill. Differences to be followed up/resolved.
- viii. Provision of fuel and lubricants shall be strictly limited per each vehicle per month in accordance with the order signed by the Management.

1. Vehicle insurance

495. The Financial Manager should ensure that all Project vehicles are comprehensively covered and that all drivers are noted on the insurance policy. Under no circumstances may uninsured drivers drive the vehicles. The insurance policies should be renewed annually or as stipulated in the policy. The safety of cars is the responsibility of the drivers assigned to the vehicles. Consequently, they must ensure that the vehicles are parked in a secure area when not in use or outside working hours.

2. Maintenance

496. The drivers are required to monitor the maintenance of their assigned vehicles. The drivers must notify the project administration of the vehicles' maintenance needs so that the cars can be serviced on a timely basis. The Administration shall seek the approval of PD for any major repair and maintenance of a project vehicle. The FM team would not make payment unless prior approval on estimates of such repair has been obtained as per approved procurement process and PD has accorded approval for the cost. Ideally, a service provider should be engaged for this purpose.

M. Internal Controls

1. General

497. PMU is subject to numerous internal controls stipulated in the provincial Rules of Business, Delegation of Financial Powers Rules, Procedures for the Assignment Account and Revolving Fund Account, Sindh PPRA Rules, Accounting Policies and Procedures (APPM) etc. Compliance with the established internal controls, however, remains “weak” as per independent audit reports and therefore the project needs to pay special attention to internal controls in its operations. Actions that can strengthen internal controls—based on government system and IFAD guidelines are summarized hereunder:

- i. Segregation of duties;
- ii. Authorization;
- iii. Reconciliation and checks
- iv. Restricted access; and
- v. Monitoring and Review

Internal Control Regime adopted by IFAD for its operations

IFAD requires that R/B to follow COSO Internal Control Framework in designing internal controls to achieve (a) operations; (b) reporting; and (c) compliance related objectives in project operations. The COSO Framework has five components of internal controls:

<u>Components</u>	<u>Requirements</u>
Control Environment	Competent project staff of high integrity—including project leadership, a sound organizational structure with clearly established job description and a strong culture of accountability.
Risk Assessment	A system of identifying, preventing, and rectifying problems to achieve results, ownership of processes and support from all key stakeholders.
Control Activities	Suitable policies and procedures included in PIM, compliance assessment to improve control environment, a robust accounting system including back-up of relevant data.
Information and Communication	Continuous horizontal and vertical flow of critical information for informed decision making, an active PSC providing direction and oversight, all line departments on board, IPs are alert to risks and PMU is closely managing information/communication processes
Monitoring	PMU has developed reporting template for continuous monitoring risks to the project and taking prompt remedial measures. Monitoring reports are shared with key stakeholders for their input/action.

Finance Manager/Senior Management is encouraged to review details at https://www.ifad.org/elearning_cfs/04-New%20COSO%20Principles%20applied%20in%20IFAD%20DECEMBER%202015%20Final.pdf

2. Segregation of duties

498. An important element in any control system is the separation of those duties which would, if combined, enable one individual to record and process a complete transaction. It is the Finance Manager's responsibility to ensure that the following duties are segregated under the project: preparation, authorization, execution, custody, recording and operation of systems

3. Authorization

499. Authorization controls require the certification that a transaction or event is acceptable for further processing. Several types of authorization are in effect at the project, mainly in the procurement cycle, payment cycle, and bank and cash management cycle including reconciliation. The FM team should ensure that the authorizations of PMU staff ensure efficient implementation while keeping the risk as low as possible. The authorization of project staff should be in line with their respective job descriptions.

4. Verification

500. Transactions and significant events are verified before and after processing, e.g. when goods are delivered, the number of goods supplied is verified with the number of goods ordered. Afterwards, the number of goods invoiced is verified with the number of goods received.

5. Reconciliation and checks

501. Reconciliations between independent, corresponding sources of data are a key control for identifying errors and discrepancies in balances. The FM section should perform the following reconciliations each month:

- i. Bank reconciliation
- ii. Reconciliation between system and special account receipts and payments statement
- iii. Any reconciliation or balancing amount should be promptly cleared. Unusual or long outstanding reconciling items must be brought to the attention of the financial officer. The financial officer will review and sign all reconciliations as evidence of his review.

502. In addition, physical checks should be performed on assets held and on petty cash—if maintained.

6. Reviews of operating performance

503. Operating performance is reviewed against a set of standards on a regular basis, assessing effectiveness and efficiency. If performance reviews determine that actual accomplishments do not meet established objectives or standards, the processes and activities established to achieve the objectives should be reviewed to determine.

504. All data, records and assets should be kept in a physically secure environment. This should cover safe keeping of finance records such as official order forms and bank details. In addition, any petty cash should be kept securely. Financial data and other records should also be protected in the form of back up procedures. All work should be regularly backed up and copy records stored securely off site.

7. Restricted access

505. All data, records and assets should be kept in a physically secure environment. This should cover safe keeping of finance records such as official order forms and bank details. In addition, any petty cash should be kept securely. Financial data and other records should also be protected in the form of back up procedures. All work should be regularly backed up and copy records stored securely off site.

8. Monitoring and review

506. As detailed in financial reporting section later, periodic financial reports must be prepared and submitted to IFAD. For the purposes of internal control, the same information should be prepared and monitored by the project Director on a monthly/quarterly basis. The reports should be prepared on a timely basis and should normally be available for distribution two weeks after the end of the reporting period to which they relate. The periodic reports should be reviewed by the FM, and PD as a minimum. Where necessary, corrective action should be taken to ensure the authorized budget and procurement plan are not breached.

507. Competent supervision helps to ensure that internal control objectives are achieved. This includes assigning, reviewing, and approving an employee's

9. Supervision

4. Competent supervision helps to ensure that internal control objectives are achieved. This includes assigning, reviewing, and approving an employee's work.

10. Information and technology related controls

508. Information and technology controls can be both general and related to applications. The major categories of general controls are (1) entity-wide security program planning and management, (2) access controls, (3) controls on the development, maintenance and change of the application software, (4) system software controls, (5) segregation of duties, and (6) service continuity. Application controls are the structure, policies, and procedures that apply to separate, individual application systems, and are directly related to individual computerized applications. These controls are generally designed to prevent, detect, and correct errors and irregularities as information flows through information systems.

509. The SCRП will have independent arrangement for internal audit to strengthen internal controls within the project. An Internal Audit Manager shall be engaged for this purpose. Details is provided in the relevant section of this manual.

Summary of Mandatory Checks

- i. Monthly bank reconciliation must be performed and record thereof maintained;
- ii. Budgetary controls must be ensured for each transaction at the PMU. Further on monthly basis, budget v/s actual report must be prepared by the FMS and shared with the PD and Project Steering Committee for continuous project oversight;
- iii. Fixed Asset Register shall be maintained. These assets shall be tagged and physically verified periodically by the admin section of the PMUs. Accuracy and completeness of the fixed assets register shall be verified independently periodically;
- iv. FM team shall maintain complete documentation for each category of expenditure and it shall also conduct periodic/random inspection of partner organizations' project record to ensure that project activities/expenditure are properly documented and factually reported.

Specific documentation requirements for different partner organizations are provided in PIM.

- v. Internal Auditor shall review project transactions, processes, procedures, and performance at least semi-annually to provide assurance regarding the fiduciary controls, risk management and monitoring mechanisms in place;

11. Controls related to IPs and VO/IGs

- i. MOUs signed with IPs, VO/IGs should clearly establish roles and responsibilities
- ii. VO and IGs plans should be based on solid evidence and drawn on prescribed template to create harmony across all organizations;
- iii. Provincial government should notify specific activities to be implemented by line departments under the project. VO & IGs should be aware of this in their plans etc.
- iv. Release of funds should be in tranches—and subject to continuous fulfilment of criteria—as stipulated in MOUs;
- v. Transparent criteria should be used for lending funds to farmers which should include i.e. age group, social status, amount of each loan, recovery time etc.
- vi. Recovery of financing provided to farmers should be fully documented down to individual beneficiaries and linked with banking information;
- vii. Periodic progress reporting—covering technical as well financial aspects, by IPs, VO and IGs should be ensured. Standardized template should be used for this purpose to generate meaningful data—including disaggregated information on project beneficiaries.;
- viii. Random inspections should be carried out by PMU/DCUs to ensure that what is reported by the partner organizations is credible;
- ix. PMU/DCUs shall maintain complete record of their inspection for external review i.e external audit, IFAD missions etc.

12. Controls related to Private Partners under 4Ps Arrangements

- i. Conduct post qualification assessment to ensure these partners have technical, managerial, and financial management capacity to deliver against their contractual obligation;
- ii. Ensure monthly/quarterly and annual reporting against business/work plans on the prescribed formats included in contracts with these private partner organizations. The reporting date will be one week after the close of the period for which the report is due. Accounts Officer—placed in each District, shall ensure these partner organizations understand and comply with the applicable reporting requirement;
- iii. Conduct periodic verification to ensure that the reporting by these partners is credible;
- iv. Assess randomly—from time to time, that these partners continuously comply with the technical, managerial, and FM requirements as per the terms of their engagements;
- v. Obtain certification/verification from the partners that taxes are being deducted from payments they are making to different beneficiaries, and proper documentation is being maintained of all transactions as required.
- vi. PMU/DCUs shall maintain complete record of their inspection for external review i.e external audit, IFAD missions etc.

13. Controls related to Extension and TVET Service Providers (Trainings)

- i. Conduct post qualification before awarding contract to ensure that service providers have sufficient technical, administrative, and financial capacity for the required tasks;
- ii. Ensure training plans are agreed before any training is imparted;
- iii. Copies of such plans should be maintained in PMU and DCUs;
- iv. Ensure that selection of beneficiaries is subject to established criteria;
- v. Ensure that for each training, service provider shares both training schedule, training material (hard or soft copies as appropriate)
- vi. Conduct random inspection of training events—and cross-check whether trainees are the same that are indicated in the training schedule/plans and instructors are also the same that are required to deliver the training;
- vii. A training report for each major training—2-3 pages write-up coupled with annexes i.e. list of participants (CNIC, address, title and duration of training, certificate of completion for accredited courses issued by the training institute, pictures etc.
- viii. Ensure that the service provider is maintaining job placement data of each trainees—whether self-employed or hired as laborers with someone along with contact information for cross-check/verification as needed.
- ix. PMU/DCUs shall maintain complete record of their inspection for external review i.e external audit, IFAD missions etc.

N. Financial Reporting

510. IFAD requires borrower/recipient to maintain accounting records that are adequate to reflect the operations, resources and expenditures related to the project up to the Financing/grant Closing Date. In addition, the borrower/recipient is required to deliver detailed financial reports on its operations, in accordance with standards and procedures that are acceptable to IFAD. Project accounting records and financial statements must be prepared in accordance with IPSAS-Cash Basis Accounting. This information should be specified in the notes to the audited financial statements³⁴.

1. Annual Project Financial Statements

511. IFAD requires the project to deliver unaudited project-specific financial statements annually, within four months of financial year-end, covering the duration of the implementation period. The Financial statements must contain all material and relevant information required to provide IFAD and other stakeholders with a full understanding of the project's activities and financial position. The reporting period will be a period of twelve months—starting from 1 July to 30 June coinciding with Pakistan's financial year. The content of the project's financial statements is prescribed under the applicable accounting standards used as the basis of preparation. IFAD also requires certain additional specific disclosures. A summary of the required content for project financial statements is given below:

- i. Comparison of budget and actual amounts;

³⁴ Details are available in the IFAD's Handbook for Financial Reporting and Auditing available at <https://www.ifad.org/documents/38711624/39421009/IFAD+Handbook+for+Financial+Reporting+and+Auditing+of+IFAD-Financed+Projects/133b165d-15c7-4f79-8217-ae95b79dd67>

- ii. Notes (a summary of significant accounting policies and other explanatory notes);
- iii. Statement of cash receipts and payments;
- iv. Fixed asset schedule;
- v. Withdrawal application statement;
- vi. Sources and uses of funds statement; and
- vii. Designated Account statement and reconciliation.

512. PMU will ensure that IFAD-specific disclosures referred to above are easily and clearly traceable. PMU will disclose the contribution of the Government's Counterpart Funds and the Beneficiaries Contribution (both in cash and in-kind) in the financial statements. The quantification of the contribution should be consistent with the policy agreed with IFAD and readily available for verification by external review i.e. IFAD, External Audit etc.

513. To provide guidance to the SCRPs, sample financial statements that may be customized further for meaningful and effective financial reporting to IFAD have been attached as **Annexure-19: Financial Tables for the Supervision Missions** to this manual.

2. Interim Financial Reports

514. It is important for any project to monitor its financial performance continuously. IFAD emphasizes the need for such monitoring. The PMU needs to analyse significant variations between planned and actual spend, take remedial actions—where required and submit interim financial reports to IFAD. This practice needs to be established. Several IFAD's supervision missions recommended this action and required that Interim Financial Reports (IFRs) may be used to operationalize this practice. The aim of IFRs is to answer the following questions regarding a reporting period: What expenditures were incurred, paid by which financing source, at what time, for what purposes and what was accomplished (output). As the ideal set of reports depends on the project's activities and the project risk profile, some supplementary reports might also be included to complete the set of reports. Generally speaking, the reported expenditures in the IFRs (totals and by financier) should match with those reported by the project to the government as well as other possible financiers. Usually, the template of the annual financial report (as briefly explained above) is sufficient for interim financial reporting as well. **Annexure-17: Guidelines for Interim Financial Reporting** provides detailed guidance for Interim Financial Reporting.

515. The requirement of the SCRPs submitting IFRs to IFAD need to be complied with. The project may discuss the format and narrative part of the report with IFAD.

3. Analytical Reviews

516. PMU, while finalizing financial statements, must carry out an analytical review to ensure that financial statements present a fair view of the financial health of the project. The external audit will also review these statements from this perspective. Analytical reviews will minimize the risk of errors and irregularities being reported in financial statements.

- i. Is the financial information consistent with the available record?
- ii. Is any expenditure unusual or ineligible? Does the PMU have any solid justification to explain such differences away? Has such justification been properly examined, agreed on with the relevant stakeholders, and fully documented for internal/external scrutiny?
- iii. Are there trends or comparisons that should be clarified? Is expenditure pattern broadly aligned with the activities envisaged in the AWPB?
- iv. Are reported expenditures within budget and consistent with the cost estimates?

- v. Are there significant computational errors and/or inconsistencies in the information presented
- vi. Are there any indications of fraud and corruption noted in the review?

517. PMU shall prepare monthly and quarterly financial reports to identify possible cost savings, detect possible misuse of project funds, and ensure that operating remains within agreed budget. The report is for internal consumption. The report will indicate expenditure incurred against budget during the month and the cumulative expenditure recorded till the end of the preceding month. Further, the expenditure by categories and by sources of funds shall be documented in the report. The report will also indicate balance of imprest funds and preparedness for next WA.

518. These reports should be linked with the AWPB to ascertain whether the activities are on track, if they are not, what needs to be done to make mid-course correction

O. Internal Audit

1. Responsibilities

519. SCRCP shall engage the services of a qualified Internal Auditor. The internal auditor shall report to the Project Director, PMU. The internal audit function shall cover the following aspects of the project:

- i. Adequacy and effectiveness of financial, operational, and management controls against relevant risks;
- ii. Compliance with applicable laws, rules, and regulations;
- iii. Economy, efficiency and effectiveness in managing operations (VFM);
- iv. Safeguarding of organizational assets
- v. Suitability, accuracy, reliability, integrity of financial and other relevant information
- vi. Integrity of the process to establish adequate protection against errors, frauds, and losses of all kinds
- vii. Mitigating other fiduciary risks—especially ones arising from public procurement and corrupt practices
- viii. Supporting improvement in governance process at PSC’s level through recommendations;

2. Process modalities

520. The Internal Audit function shall report to the Project Director directly and it shall be responsible for (i) planning, executing, and reporting on internal audit to PD/P&DD—covering IPs, and Extension Service Providers, VOs and other partner organizations; (ii) facilitate implementation of audit recommendations—internal/external audits; and (iii) ensuring that the recommendations of IFAD Mission are fully complied with by the project. The TORs for the hiring of an Internal Auditor have been included as an **Annexure-18**: TORs of Internal Audit to this manual.

521. PMU shall select the internal audit firm in accordance with IFAD’s procurement guidelines. IFAD’s No Objection to the TORs of the internal auditing firm shall be obtained before initiating the procurement process. The contract shall be initially for one-year subject to extension based on the performance of the firm and IFAD’s No Objection.

P. External Audit

1. General considerations

522. As per the Constitution of Pakistan, the Auditor General of Pakistan (AGP)—which is the Supreme Audit Institution (SAI) of Pakistan, shall conduct audit of the project. An audit is required to confirm whether the financial statements provide a true and fair view in all material respects of the financial activities undertaken.

523. PMU shall prepare—and submit to the AGP the Annual Financial Statements (AFS within two (2) months of the close of a financial year for this purpose. Report of each Audit—along with the Management Letter shall be submitted to IFAD within six months of the close of financial year (by 31 December) to which the audit relates. PMU must maintain continuous liaison with the Director General Audit, Sindh to ensure that (a) the audit of project is included in the annual audit plan of the audit office; (b) audit is executed on time; (c) audit quality is acceptable to IFAD; and (d) audit report is shared with IFAD within the stipulated timeline i.e. by 31 December for the preceding financial years. Follow-up with the relevant FAO is also critical to ensure timely resolution of audit observations at Departmental Audit Committee (DAC)—to minimize the backlog of audit observations during the life of the project and mitigate the risk of audit observations converting into ineligible expenditure which would require to be refunded to IFAD.

524. The contractual agreements with service providers/private partners under 4P arrangements will include a provision for external audit of activities funded with IFAD funds. The service providers/private partners shall propose names of three reputable chartered accountant firms for this purpose out of which PMU shall select one against already notified criteria. The audit shall be conducted within three months of the close of financial year and audit report furnished to PMU within six months of closure of annual accounts. The maximum duration of contract with an auditing firm for this purpose shall be three year.

Key Source Document for External Auditing

The IFAD Handbook for Financial Reporting and Auditing of IFAD-financed Projects is available online for public use and dissemination. It is primarily intended as a guide for IFAD borrowers and recipients and other external stakeholders on operational aspects and requirements related to financial reporting and auditing of IFAD-funded projects. Tailored guidance is provided for investment projects and for grants, both those subject to the Policy for Grant Financing and those financed by supplementary funds. The finance team should use the guidelines in external auditing matters.

<https://www.ifad.org/documents/38711624/39421009/IFAD+Handbook+for+Financial+Reporting+and+Auditing+of+IFAD-Financed+Projects/133b165d-15c7-4f79-8217-ae95b79dd67>

525. External audit of the SCRCP shall be conducted by the Office of the Auditor-General of Pakistan (OAGP) that has constitutional mandate for external audit of all public sector entities. The OAGP conducts compliance, financial, and performance audits—following International Standards of Supreme Audit Institutions (ISSAIs) and its reports are laid before the Public Accounts Committees (PACs) at national and provincial levels. The external audits are, in general, carried out for following purposes:

- i. Provide an independent assurance of accountability;
- ii. Give credibility to the financial statements and other management reports;
- iii. Identify weaknesses in internal controls and financial systems;
- iv. Verify compliance with financing agreement provisions relating to financial matters; and

- v. Make recommendations for improvement.

526. A network of Field Audit Offices (FAOs) has been established for this purpose. The Office of Director General Audit, Sindh is the FAO for the external audit of the SCRCP.

527. PMU must maintain continuous liaison with the Director General Audit, Sindh to ensure that (a) the audit of project is included in the annual audit plan of the audit office; (b) audit is executed on time; (c) audit quality is acceptable to IFAD; and (d) audit report is shared with IFAD within the stipulated timeline i.e. by 31 December for the preceding financial years. Follow-up with the relevant FAO is also critical to ensure timely resolution of audit observations at Departmental Audit Committee (DAC)—to minimize the backlog of audit observations during the life of the project and mitigate the risk of audit observations converting into ineligible expenditure which would require to be refunded to IFAD.

528. PMU is responsible for preparing the audit (financial statements, accounting reports and other necessary documents), providing adequate office space and other facilities, and assisting the auditors in the course of their mission. In addition to the preparation of year-end financial statements and other reports, getting ready for the annual external audit entails the following:

- i. Printing of all year-end accounting ledgers and reports;
- ii. Verifying that all vouchers and supporting documents exist;
- iii. Verifying that all accounting ledgers, accounting records and supporting documents are properly filed;
- iv. Preparing a complete file for the auditors (including financial statements and reports, accounting ledgers, individual account justifications, reconciliations, etc.);
- v. Ensuring that IPs, VOs, Extension and TVET Service Providers and other partner organizations that use project funds have separate financial reports and statements detailing the utilization of project funds); and
- vi. Organizing all site visits, meetings and work sessions at the request of the auditors.

529. Sample project financial statements have been provided as **Annexure-19: Financial Tables for the Supervision Missions** which may be refined for meaningful financial reporting as per the requirements of IFAD.

2. Types of audit opinion

530. The auditors are required to issue a report including the audited financial statements and expressing their opinion on the Project financial statements covering (i) the Project's compliance with national and IFAD rules and guidelines in the area of procurement and disbursement, and (ii) the project's compliance with financing agreement covenants. The external audit will examine SOEs, particularly the adequacy of the procedure used for preparing the SOEs, the eligibility of SOE expenditures, and the extent to which IFAD can rely on this disbursement method. Further, the external audit will examine the designated account statements and reconciliations, indicating whether the funds received and disbursements made are fairly presented in the statements.

531. While certifying project financial statements of a project, the DGA Sindh can express either one of the following opinions:

- i. An unqualified opinion indicates the auditor's satisfaction in all material respects with the preparation of the financial statements, and with their consistency, adequacy, and compliance with regulations, statutory requirements and any additional requirements stated in the request for audit sent to the DGA (Sindh) by PMU.
- ii. A qualified opinion reflects that the auditor has some reservations on specific areas

and concludes that an unqualified opinion cannot be issued, but deems that the effect of any disagreement, uncertainty or limitation of scope of the audit does not require an adverse opinion or a disclaimer of opinion. PMU should urge the auditor to clearly state the financial effect of the qualification in the report.

- iii. An adverse opinion is issued when the effect of the disagreement is so pervasive and material to the reliability of the financial statements that the auditor concludes that a qualification of the report will be insufficient to disclose the misleading or incomplete nature of the financial statements.
- iv. A disclaimer of opinion is issued when the possible effect of an uncertainty or of a limitation on the scope of the auditor is so significant that the auditor is unable to express an opinion on the financial statements.

3. Key requirements in Management Letter

532. Audit reports should also include a Management Letter addressing the adequacy of the accounting and internal controls systems and more specifically:

- i. Commenting on the financial and accounting records, systems, procedures and controls that were examined during the course of the audit;
- ii. Identifying specific deficiencies and areas of weakness in systems and internal controls;
- iii. Bringing to the Borrower's and IFAD's attention any other matters that they consider significant and
- iv. Providing recommendations to improve the accounting and internal controls systems. If deemed necessary, the management letter may also provide:
- v. Comments on the economy, efficiency and effectiveness in the use of Project resources;
- vi. Comments on the achievement of planned Project results and communicating matters that have come to their attention during the audit which might have a significant impact on the implementation and sustainability of the Project;
- vii. Comments on the extent of compliance or non-compliance with the legal and financial obligations and commitments of the Project.

533. The management letter must also show evidence of the auditors' follow-up of recommendations issued during the previous year's audits.

534. As per the established practices, an audit report is finalized after discussion at Departmental Accounts Committee (DAC) level in which PMU gets an opportunity to clarify its stance in response to the findings and recommendations highlighted in the report. The recommendations made in the final audit report need to be implemented as next audits examine the implementation status of previous audit recommendations.

535. The final audit reports must be communicated to IFAD at the latest 6 months after the end of the fiscal year, i.e. before December 31st of the following year. The financing agreement and the General Conditions attached thereto specify IFAD's remedies in case of non-submission of the audit reports within the required timeframe, which may include the suspension of the Borrower right to request withdrawals from the loan/grant accounts.

536. IFAD's Financial Management Services Division conducts a detailed review of the audit report in order to assess the quality/reliability of the audited financial statements and audit reports, as well as the performance of the auditors. Within 60 days of receiving the audit report, IFAD informs the GoP of the results of this review. In the case of problems/irregularities arising from IFAD's review or from the audit report (e.g. qualified or adverse opinion, or disclaimer of opinion), IFAD communicates to the GoP an action plan detailing the remedial actions to be implemented, as well as the corresponding deadlines. The GoP is required to keep IFAD informed as to the progress of implementation of the action plan.

4. Audit Follow-up

537. Follow-up on audit recommendations usually assesses the adequacy, effectiveness and timeliness of actions taken by the project and those charged with governance on observations and recommendations given in audit reports. Audit reports generally include actions that seek to correct, prevent or improve the working of the auditee. Further, such actions indicate agreed timeframe for implementation. A weak follow-up is likely to render external audit ineffective because the systemic improvements emphasized in audit reports would not be implemented. This is the reason IFAD gives importance to these follow-ups.

538. IFAD requires the project to maintain an Audit Log on the format given in the table:

Table-12: Template for Audit Follow up

AUDIT LOG (TEMPLATE)					
Sr. No	Audit Observation	Total Amount of observation	Status	Total Amount not settled / outstanding	Remarks
Insert #	Reproduce Audit Observation from the External Audit Report	Indicate the value held under audit observation	What is the viewpoint of the project? What is the decision of the Departmental Accounts Committee (DAC) on the audit observation? Has it fully or partly settled the observation? In some cases, only a fraction of the amount held under audit observation is settled whereas the material fraction remains unsettled. In some cases, the observation may not have any amount attached but the nature of observation would be serious enough to warrant a DAC decision?	What is the amount settled/unsettled etc.	Is the action taken by the DAC/PMU appropriate in the circumstance and no further action is required? Or what else should happen?

539. PMU is required to be alert to the follow-up actions. This will require it to engage with the DGA (Karachi) and provincial P&DD to hold frequently DAC meetings. Rigorous follow-up is likely to improve internal control environment.

Q. Completion and Financing

540. The SCRCP completion date is set at (to be inserted later) and the closing date six months later, on (to be inserted later). One year before completion date, the Project must start reducing its activities, and concentrating on the setup and/or capacity building of the entities that will take charge of project activities after completion. On completion date, all activities under IFAD funding must be completed. Only expenditures relating to goods delivered, works completed, and services rendered on or before (to be inserted later) are eligible for reimbursement by IFAD. The FM and Procurement Specialist must therefore carefully and periodically review the procurement plan during the last implementation year, so that contracts that cannot be executed on time are cancelled as soon as possible.

541. On completion date, Project staff contracts must be terminated, except for key staff who are needed during the winding up period (i.e. the six months from Project completion to the closing of the financing). The key staff generally include the Project Director, the FM, the M&E Specialist, and the required support or outsourced staff (for example, one driver, one office helper and one guard).

542. The only expenditures authorized during the completion period are key staff salaries, operating costs, and expenses related to the preparation of the completion report and the final audit. In addition, during this 6-month period, the disbursements related to contracts fully executed prior to the completion date are authorized, provided they are eligible. The FM is responsible for preparing the related withdrawal applications, and must ensure that all eligible expenditures are claimed before closing date.

543. During the last project implementation year, the FM prepares an initial advance recovery plan and submits it to IFAD for no objection. The recovery of the initial advance by IFAD is triggered by one of the following two criteria, whichever comes earlier:

- i. The undisbursed balance in the loan account is twice the amount of the initial advance, or
- ii. Six months before completion date (i.e. to be inserted later).

544. The recovery plan indicates, for each withdrawal application submitted until closing, the percentage that must be retained by IFAD to recover the initial advance, and the percentage that must be reimbursed to the Project in order to replenish the designated account. As the closing date approaches, certain WAs may need to be fully allocated to the recovery of the initial advance, therefore drawing no reimbursement to the designated account.

545. In the event that the initial advance is not fully recovered at closing date, the GoP must reimburse the unjustified balance of the advance to IFAD. Moreover, at closing date, IFAD cancels the undisbursed balance of the loan. IFAD closes the loan account once the following conditions are met:

- i. Full recovery of the initial advances (or reimbursement of any unjustified amount);
- ii. Confirmation by PMU of the final WA sent to IFAD (after verification that all eligible expenditures have been claimed); and
- iii. Submission of the completion report and the final audit report.

546. At closing date, PMU is required to conduct a final inventory of Project assets, including the detailed description, acquisition date and value, book value, and asset location. This inventory report is submitted to the P&DD, when the assets are transferred to the GoS. Finally, all Project files and documents must be scanned / saved and properly archived in order to comply with the legal covenant to retain them for a period of 10 years after closing.

R. IFAD's Financial Management Support

1. Overview of IFAD support

547. IFAD's Financial Management Division (FMD) will remain involved with the project—from PDR stage to financial closure of the project to ensure that fiduciary requirements are met. The FMD periodically shall periodically field supervision missions for this purpose with the aim to:

- i. Assess the progress of project implementation;
- ii. Identify/anticipate problems or constraints in implementation; and
- iii. Propose solutions or corrective measures for improvement.

548. FMD's Finance Officer will establish ongoing contact with the Project, by liaising with the Financial Manager of PMU and will be available to provide remote support on financial management matters. In addition, FMD will visit the project during missions to the Project (represented by either the Finance Officer or an appointed consultant). Mission types include supervision missions, mid-term reviews and implementation support missions. During missions, FMD will assess and monitor the adequacy of project's financial management arrangements such as accounting, budgeting, internal controls, flow of funds, financial reporting and the auditing practices.

549. If the project's financial management arrangements are deemed acceptable, IFAD will rely on them to provide assurance that the financing proceeds are being used for the intended purposes. In cases where IFAD identifies weaknesses in the financial arrangements, it will require the project to take remedial measures to mitigate fiduciary risks.

550. The key findings and recommendations of missions will be captured in the Aid Memoire which is shared with the P&DD. The Aid Memoire includes an overview of issues identified and actions that need to be taken by the project/IFAD to enable the project to achieve its intended objectives.

2. Roles and responsibilities related to IFAD support

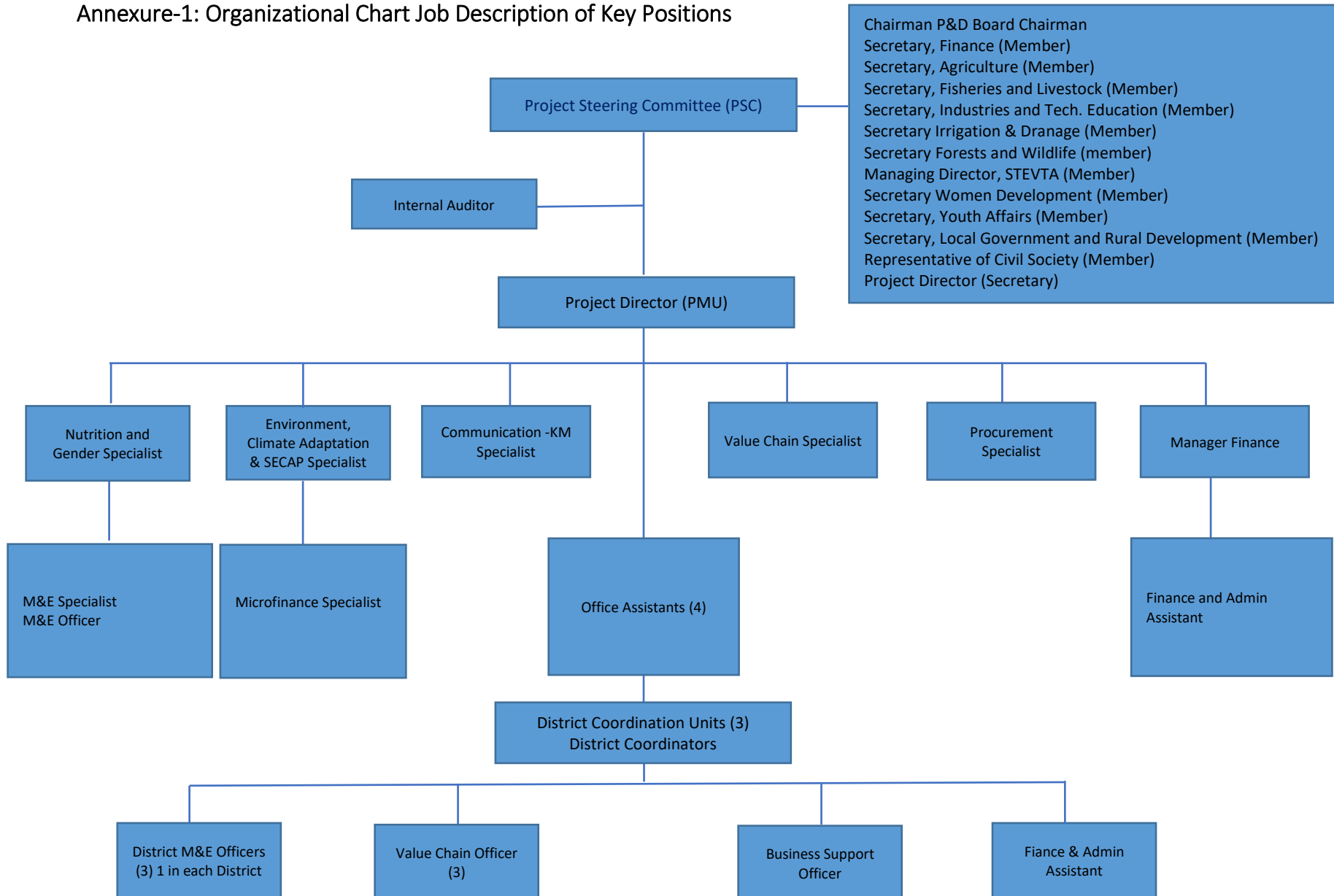
551. PMU will be required to participate in IFAD missions as follow:

Stage	Project roles and responsibilities
<i>Before IFAD missions</i>	<ul style="list-style-type: none"> • Prepare Appendix 1 and submit to the FO/Consultant in electronic format (Excel Workbook, including formulae) <u>before</u> commencement of the mission – the FO/Consultant will specify the date range to be covered within Appendix 1. • Each project party (PMU, SPMUs and other implementing agencies) to complete the Financial Management Assessment Questionnaire (FMAQ) and submit to the FO/Consultant in electronic format (FO to provide most recent template). • Prepare all other information as requested by FO/Consultant before commencement of the mission.
<i>During IFAD missions</i>	<ul style="list-style-type: none"> • Provide the FO/Consultant with all information which was requested before the mission. • Arrange meeting with the auditors (internal and external) and any other selected party requested by the mission. • Ensure that all FM staff are available to assist the FO/Consultant in performing their duties which may include: <ul style="list-style-type: none"> ○ Review of financial reports, reconciliations ○ Physical verification of fixed assets and inventory ○ Meeting with the auditor ○ Reviewing and completing the FMAQ • Discuss identified FM weaknesses and risks and assist the FO/Consultant with developing appropriate actions for inclusion in the aide memoire.
<i>After IFAD missions</i>	<ul style="list-style-type: none"> • Respond to any wrap-queries from the FO/Consultant • Commence with implementing all actions which are included in the Aide Memoire • Update the Action Tracker (see illustration in 21.11) with all actions raised during the missions.
<i>Ongoing</i>	<ul style="list-style-type: none"> • Monitor and update the Action Tracker to ensure all actions are implemented in a timely manner. Liaise with the Financial Manager if required. • Respond to ad-hoc queries received from the Financial Manager or other IFAD staff as it related to FM matters.

552. The PMU is required to do proper preparation for the mission to make this more meaningful since the mission lasts for around two weeks. The PMU should prepare financial tables and compliance status vis-à-vis agreed loan covenants. IFAD has also prescribed templates for this purpose which are attached to this manual.

ANNEXURES

Annexure-1: Organizational Chart Job Description of Key Positions



Note: Some lower staff/ministerial positions are not reflected in the organizational chart. For details, please consult the Cost Tab that provide complete information on the staffing etc. TORs for key positions have been indicated hereunder where for the remaining positions, the TORs will be finalized once PC-1 is approved.

TORs: Project Director, PMU

Assignment Details	
Assignment Title	Project Director, PMU
Geographic Coverage	Three Coastal Districts of Badin, Sujawal and Thatta
Project	Sindh Coastal Resilience Project
Project Office	Project Management Unit, Karachi
Duration	Project life (Minimum three years)
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Karachi
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 60 million and USD 40million Sindh Coastal Resilience Project) covering three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p>	
Scope of Work:	
<p>The Project Director will be responsible for the overall management and coordination of the programme activities as well as the programme implementation in accordance with the provision of financing agreement and project design. The PD will act as the principal accounting officer (PAO) for the Programme and report to the Programme Steering Committee (PSC), which is chaired by the Chairman, P&D Board, Sindh.</p>	
Role and responsibilities:	
<ol style="list-style-type: none"> i. Ensure that all resources are made available for the timely and smooth implementation of the project activities as per the project design and scope of the financing agreement(s); ii. Be responsible for the appropriately capacitating of PMU/DCUs including necessary recruitment, account(s) opening and operation and management of PMU in an effective and efficient manner; iii. Establishment of sound management, supervision and monitoring system(s) within the programme for planning, coordination, reporting, financial management, M&E and troubleshooting in line with financial agreement(s) and programme documents; iv. Develop an effective stakeholders' and media management and develop and operationalize communication strategy for the programme and efficient dissemination of all programme purpose and activates within and outside programme area; v. Be responsible for the overall management of the programme and of the PMU and DCUs staff and activities undertaken by implementing partners; vi. Lead the preparation of the annual work plan and budget (AWPB) and associated procurement plan and ensure its timely submission to relevant fora and seek necessary approvals; 	

- vii. Ensure the effective and efficient utilization of programme funds and other resources according to the AWPB and procurement plan through supervision and monitoring;
- viii. Ensure that progress, audit and other reports are produced and submitted to the appropriate parties on a timely basis;
- ix. Ensure that the project staff and all relevant stakeholders comply with the project's gender and targeting strategies. effective targeting of the poor and vulnerable in target Tehsils, Union councils and villages and mainstreaming of gender, youth and indigenous people in the programme, achievement of gender equality related outcomes as planned, and identifying and managing any social inclusion related risks;
- x. Ensure the timely dissemination of project experience and results to relevant stakeholders within the learning community;
- xi. Ensure effective linkages, liaison and networking with other implementation partners and service providers either working in the programme area or potentially concern with project activities and with other relevant interventions;
- xii. Establish effective fora for public-private sector interaction and promotion of private sector linkages with the provincial, district and regional/valley/cluster levels or any other beneficiary group representing the programme at relevant events and meetings;
- xiii. Implement the decisions of the PSC and recommendation of the IFAD missions; and
- xiv. Perform any other duty relevant to the programme as may be assign by the PSC and IFAD.

Qualification, Skills and Experience Required.

A civil servant of at least BPS-19, from Pakistan Administrative Services/Provincial Management Services. Master level educational attainment in social or management sciences; MBA, economics, development studies, public administration or any other related discipline, at least 15 years' experience at similar level, having managed donor funded project(s) involving policy reform, value chain development, labor market/employment generation, strong communication, team building and management skills; and sound understanding of the context of coastal districts in particular and Sindh province in general, customary practices, policy environment and economic dynamics.

TORs: District Coordinator, DCU (Three positions)

Assignment Details	
Assignment Title	District Coordinator, PPMU
Geographic Coverage	Assigned district
Project	Sindh Coastal Resilience Project (SCRP)
Project Office	Project Management Unit, Karachi
Duration	Project life
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Badin/Sujawal/Thatta
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p> <p>Scope of Work:</p> <p>The District Coordinator will be responsible for the overall management and coordination of the programme activities as well as the programme implementation in accordance with the provision of financing agreement and project design in his/her assigned district. He/she will report to Project Director for all aspects of his/her assignment.</p> <p>Role and responsibilities:</p> <ol style="list-style-type: none"> i. Establishment of systems for planning, coordination, reporting, financial management, M&E and trouble-shooting at the district level. ii. Be responsible for the overall management and coordination of the Programme activities in the district and of the DCU staff. iii. Preparation of the District annual work plan and budget (AWPB) and associated Procurement Plan; iv. Ensure the effective utilization of Programme funds and other resources according to the AWPB through supervision and monitoring; v. Ensure mainstreaming of gender in the Programme, achievement of gender equality related outcomes impacts as planned, and identifying and managing any gender-related risks; vi. Ensure the timely dissemination of Programme experience and results to relevant stakeholders within the learning community; vii. Ensure adequate linkages, liaison and networking with other implementation partners and service 	

providers either working in the district or potentially concerned with Programme activities and with other relevant interventions;

- viii. Establish effective fora for public-private sector interaction and promotion of private sector linkages with the district and valley level farmers or any other beneficiary groups.
- ix. Represent the Programme at relevant functions and meetings.
- x. Perform any other duty relevant to the Programme as may be assigned by the PC

Qualification, Skills and Experience Required.

A civil servant of at least BPS-18 from Pakistan Administrative Services/Provincial Management Services. Master level educational attainment in social or management sciences; MBA, economics, development studies, public administration or any other related discipline, at least 10 years' experience at similar level, having managed donor funded project(s) involving policy reform, value chain development, labor market/employment generation, strong communication, team building and management skills; and sound understanding of the context of Sindh, customary practices, policy environment and economic dynamics.

TORs: Finance Manager, PMU

Assignment Details	
Assignment Title	Finance Manager, PMU
Geographic Coverage	Three Coastal districts
Project	Sindh Coastal Resilience Project (SCRP)
Project Office	Project Management Unit, Karachi
Duration	Project life
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Karachi
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p>	
<p>Scope of Work:</p> <p>The FM shall be responsible for overall financial management and reporting. The FM shall liaise with IFAD on all aspects of project’s financial management, lead capacity building activities in the area of financial management under the project to capacitate accounting staff within PMU and other partner organizations to comply with guidelines and policies and procedures, keep PD updated on latest developments and issues in project’s financial management and provide suggestion to the best possible option, maintain liaison with IFAD in managing the assignment account, and participate in Project Steering Committee meetings and activities; assist/advise the PD in all financial matters as and when required. Key responsibilities are briefly described below:</p>	
<p>Role and responsibilities:</p>	
<p>Budgeting and Planning</p>	
<ul style="list-style-type: none"> i. Assist the PD in preparation of AWPB and facilitate in the approval of AWPB from Project Steering Committee. ii. Prepare report on monthly financial progress of the project for the attention of the PD and further discussions. iii. Prepare annual, quarterly and semi-annually disbursement forecasts for all components of the project/s in line with project’s procurement plan and Work Plan/Cash Plan. 	
<p>Funds Management</p>	
<ul style="list-style-type: none"> iv. Ensure timely releases of counterpart funds from provincial government. 	

- v. Liaison with P&D, line departments, Provincial Accountant General (AG) in connection with budget, releases, disbursement and other issues of financial management.
- vi. Prepare realistic cash forecasts on quarterly basis in coordination with the project team/implementing partners.
- vii. Engage with IFAD for release of funds and maintenance of sufficient liquidity for project implementation.
- viii. Prepare and process withdrawal application in accordance with IFAD's Disbursement Guidelines for drawing funds from the assignment account(s).
- ix. Track funds and follow up with National Bank of Pakistan and IFAD to ensure timely credit of funds into the project's assignment account(s).

Internal Controls

- x. Perform internal control assessment in view of the systemic weaknesses as reported from time to time in the supervision missions/audits/periodic inspections by PMU and take remedial actions
- xi. Take measures to strengthen internal controls system as per IFAD's guidelines stipulated in this document;
- xii. Assess the need of other monitoring controls, such as internal audit and suggest it to the management accordingly.

Expenditure/Payment Processing

- xiii. Ensure compliance with internal control framework—including applicable government rules and procedures while processing payments.
- xiv. Analyze, plan, design, implement, and monitor a system to augment internal controls in line with best practices in the process of payment and expenditure management.
- xv. Apply pre-audit checks on all payments before payment from the assignment account(s) including budget availability, sanction of competent authority and compliance with applicable financial rules & regulations.
- xvi. Ensure that IFAD's No Objection Letter (NOL) is obtained for every prior review activity before processing any payment.
- xvii. Prepare request for payment and forward to PD for approval after fulfilling all codal formalities.
- xviii. Ensure that only eligible payments are forwarded Coordinator's approval and drawing funds from the assignment account.
- xix. Manage financial aspects of the contracts under implementation, including payment terms, purchase orders and variation orders.

Accounting and Record Management

- xx. Record all transactions timely and accurately in the books of accounts and ensure that no expenditure remained unaccounted.
- xxi. Maintain accounts on cash basis as per government accounting procedure i.e. New Accounting Model.

- xxii. Ensure up-to-date maintenance of adequate registers, books of accounts and records in appropriate order and format to meet the government and IFAD's requirements and to facilitate classification and analyzing the financial information for monitoring the project progress.
- xxiii. Prepare supplementary record, which provides timely and up-to-date financial information of contracts.
- xxiv. Maintain imprest /petty cash account (where applicable) and ensure maintenance of separate petty cash book and petty cash vouchers in compliance with approved procedures.
- xxv. Prepare monthly bank reconciliation statements of assignment accounts.
- xxvi. Reconcile the expenditure on government prescribed format with the office of Accountant General Sindh on monthly basis.
- xxvii. Be the payroll manager and process monthly payroll of project employees. Ensure proper payroll controls are applied and the payments are made directly in the Bank accounts.
- xxviii. Prepare and process monthly project payroll and submit to PD for approval prior to making any payment under salaries.
- xxix. Ensure that the fixed assets and inventory records are maintained for the project identifying location and user of each asset/inventory and arrange for the annual and periodical inventory of the assets/consumables.
- xxx. Ensure safe custody of all financial records for review by IFAD Missions, third party monitoring agents; and external & internal auditors.

Financial Reporting

- xxxi. Prepare quarterly financial reports and submit to PD and Bank in a timely fashion for review and approval.
- xxxii. Ensure that annual financial statements and other reports as specified under the Financing Agreements and as per recommended/suggested by supervision missions are accurately prepared and timely submitted – annual financial statements to be prepared in accordance with Cash Basis IPSAS ' Financial Reporting under Cash Basis of Accounting'.
- xxxiii. Prepare Annual financial statements of the three project/program and submit for review and approval to PD.
- xxxiv. Define and produce other financial reports, as and where required on utilization of funds to facilitate PD in decision-making process.

Audit

- xxxv. Make arrangements for timely initiation and completion audit of project and ensure that report produced is in compliance with audit requirements of the Government and IFAD.
- xxxvi. Ensure that the project is adequately reflected in audit plan of Auditor General of Pakistan and that audit is periodically conducted.
- xxxvii. Cooperating with IFAD, Government, and other partners to improve project financial management, particularly in terms of following up the action points agreed in the project legal documents, during the IFAD supervision missions, Aide Memoires and the recommendations of external auditors and internal auditors.

- xxxviii. Attend entry and exit meetings with external auditors, facilitate timely completion of audits by arranging timely submission of annual financial statement in appropriate format, supply of information and documents responding to queries, initiate actions for holding tripartite meetings and coordinating with relevant project entities in settling audit paras.
- xxxix. Prepare working papers on audit observations raised by external auditors and arrange to convene Departmental Accounts Committee (DAC) meeting to settle the audit observations to the extent legally and logically possible.
- xl. Establishment of systems for planning, coordination, reporting, financial management, M&E and trouble-shooting at the district level.
- xli. Be responsible for the overall management and coordination of the Programme activities in the district and of the RCU staff.
- xlii. Preparation of the divisional annual work plan and budget (AWPB) and associated Procurement Plan;
- xliii. Ensure the effective utilization of Programme funds and other resources according to the AWPB through supervision and monitoring;
- xliv. Ensure mainstreaming of gender in the Programme, achievement of gender impacts as planned, and identifying and managing any gender-related risks;
- xlv. Ensure the timely dissemination of Programme experience and results to relevant stakeholders within the learning community;
- xlvi. Ensure adequate linkages, liaison and networking with other implementation partners and service providers either working in the district or potentially concerned with Programme activities and with other relevant interventions;
- xlvii. Establish effective fora for public-private sector interaction and promotion of private sector linkages with the district and valley level farmers or any other beneficiary groups.
- xlviii. Represent the Programme at relevant functions and meetings.
- xlix. Perform any other duty relevant to the Programme as may be assigned by the PC

Qualification, Skills and Experience Required.

Master level educational attainment in finance, MBA, ACCA, CA (preferred) or any other related discipline, minimum 10 years' experience at similar level, having managed donor funded project(s), familiarity with Government financial regulations and IFAD financial management guidelines, and sound understanding of the community procurement and financial management of community driven sub-projects implementation.

TOR Environment, Climate and SECAP specialist

Assignment Details	
Assignment Title	Environment, Climate and SECAP specialist, PMU
Geographic Coverage	Three coastal districts of Badin, Sujawal and Thatta
Project	Sindh Coastal Resilience Project
Project Office	Project Management Unit, Karachi
Duration	Contractual (to be renewed every year based on performance)
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Karachi
Background to the project	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p> <p>Scope of Work:</p> <p>The Environment, Climate and SECAP Officer will work directly with technical officers from the PMU (in particular those in charge of Value chain, and Gender, Youth and Nutrition), DCU and project partners. He will report to Project Manager. This position demands qualified professionals having strong technical competency in providing strategic guidance to the Project Management Unit (PMU) and government line departments in building IFAD’s SECAP requirements and mainstreaming environment, climate and social safeguards projects under implementation.</p> <p>The key output for this position is to develop and implement E&S safeguards (mitigation of risks) in line with the provisions included in the Environmental Social and Climate Management Plan and the Stakeholder Engagement Plan developed during the design phase of the project. She/he will have also the responsibility to monitor project activities and work plan dedicated to climate adaptation in line with the Targeted Adaptation Assessment developed during the design phase of the project. Further, she/he will be responsible to propose possible adjustments of these frameworks during project implementation.</p> <p>Role and responsibilities:</p> <ul style="list-style-type: none"> • Monitor progress in the development/implementation of the Project’s ESCMP ensuring that the project is implemented in line with national legislation requirements, as well as IFAD’s SECAP 2021 policy, and the reporting requirements are fulfilled. • Interface with PMU and relevant government authorities to ensure implementation of environmental, climate and social safeguards and proposed mitigation actions (with focus on Biodiversity Conservation, Resource efficiency and pollution prevention, Cultural heritage, Labour and working conditions, Community health and safety, Financial Intermediaries) mentioned in the ESCMP matrix are addressed, and adapt as necessary in case of new risks identified. 	

- Implement and finalize the Stakeholder Engagement Plan (SEP), and the project level Grievance Redress Mechanism (GRM) procedures, in line with national legislation and IFAD requirements as part of the Social Environment and Climate Assessment Procedures (SECAP)
- Oversee/develop/coordinate the implementation of all safeguard-related work; and facilitate full and effective stakeholder engagement, including through a mechanism to respond to complaints from project-affected people
- Ensure social and environmental grievances are managed effectively and transparently.
- Review the ESCMP, SEP and GRM annually, and update and revise the corresponding risk log; mitigation/management plans as necessary.
- Ensure full disclosure with concerned stakeholders.
- Review the project related documentation, ESCMP Matrix and mitigations actions for each Project Components and activities proposed to better understand the implications of proposed environment and natural resources management and climate change adaptation investments under the Programme
- Ensure environmental and social risks are identified, avoided, mitigated and managed throughout project implementation; and
- Work with the M&E officer to ensure reporting, monitoring and evaluation fully address the safeguard issues of the Project.
- Strengthen the social, climate and environmental outcomes of the Project.
- Undertake safeguards oversight missions, as needed and per projects' M&E plans etc.
- Quality assurance on safeguards sections of progress reports and evaluations (e.g., annual progress reports, mid-term and final evaluations) and contribute substantively where in line with the oversight function (e.g. in support of relevant Team Lead)
- Track progress of moderate risk and other priority projects' implementation of required IPRM and ESCMP matrix
- Ensure project-level grievance mechanisms are established within the project governance structure and that relevant safeguard risks are monitored.
- Prepare an annual report on Environmental and Social Safeguards implementation in the office, capturing key lessons learned and recommendations for how to strengthen SECAP implementation moving forward.
- Support preparation of baseline surveys including climate vulnerability assessments and environmental impact analysis in the targeted community.
- Provide technical guidance to ensure that natural resource management investments reduce environmental degradation and assist farmers in the scheme cluster areas adapt to climate change impacts and contributes to sustainable land and water management practices.
- Check skill and competency of implementation partners and extensions service in terms of climate smart agriculture and sustainable fishing
- Assess, review and approve training material dedicated to climate adaptation
- Analyse and assess Umbrella Village plan, Interest Group business plan, 4P business plan in terms of climate adaptation and environmental sustainability
- Facilitate integration of relevant and cross-cutting environmental, natural resources and climate change management issues

- Periodically, carry out the necessary coordination activities for environmental activities and perform related field work as required and submitting clear and concise written reports based on field inspections.

Qualification, Skills and Experience Required.

- A minimum of bachelor's degree in environmental sciences, Environmental Management and Natural Resources Management from an accredited University is a must.
- 3-5 years' of relevant work experience implementing environmental and social safeguards requirements in projects, with relevant and proven track record in similar assignments related to implementation or supervision of environment and natural resources management projects / programmes.
- Work experience in climate change adaptation or mitigation, pasture management, integrated water resources management or experience in donor funded programmes will be an added advantage.

Technical Skills

- Demonstrated experience in in Environmental and Social Impact Assessment, Environmental and Social Management Plan and integration of those plans into development activity Planning, implementation, and Monitoring.
- In-depth understanding of Mongolian Environmental and natural resources policy and regulatory framework and SECAP or other IFI guidelines; and International Financial Institutions (IFI)'s working in Mongolia
- Good working knowledge and experience in environmental safeguards
- Experience implementing social and environmental safeguards at the project level and providing technical support to implementing partners is desirable.
- Good working knowledge of Windows-based computing programs, and electronic communication.

TOR Communication & KM Specialist

Assignment Details	
Assignment Title	Communication & KM Specialist, PMU
Geographic Coverage	Three coastal districts of Badin, Sujawal and Thatta
Project	Sindh Coastal Resilience Project
Project Office	Project Management Unit, Karachi
Duration	Contractual (to be renewed every year based on performance)
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Karachi
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p> <p>Scope of Work:</p> <p>Reporting to Project Director, SCRP, the Communication & Knowledge Management Specialist will: (a) project aims and objectives among stakeholders and target beneficiaries; b) Systematically collate project’s lessons from M&E system and convert them into knowledge products for dissemination among stakeholders; c) Foster greater information and knowledge exchange among key stakeholders and development partners.</p> <p>Role and responsibilities:</p> <p>Develop a comprehensive communication framework/Strategy and action plan, for disseminating project aims, objectives, target population and interventions for reaching out to multiple levels of target audience.</p> <p>Assist PMU in development of annual communication and knowledge management plans as part of AWP/B preparation.</p> <p>Develop effective messaging to assist key institutions and stakeholders to work towards a shared vision of achieving SCRP objectives and outcomes.</p> <p>Collaborating with team staff, and local partners to create and implement knowledge products both for the local and international audience through conferences, workshops, website, roadshows, documentary etc.</p> <p>Design and implement a multi-pronged campaign to promote programs interventions through print, digital and social media, developing new channels of engagement and knowledge sharing;</p> <p>Assist with the dissemination of results of interventions undertaken by the SCRP, and highlight project’s contribution to Sindh Government’s efforts in rural poverty reduction, nutrition and youth engagement;</p> <p>Maintain website, Facebook page, and provide advice on the use of other social media platforms.</p>	

Produce and disseminate quarterly newsletter highlighting project achievements .

Support preparation, production and dissemination of material including print, and electronic media.

Translate ideas and concepts into effective communication media including publications media using innovative communication tools.

Knowledge Management

- i. Develop and implement processes and guidelines for systematic capture of knowledge, good practices and innovation, and the sharing and use of same to improve programme implementation, including in the development of the AWPB;
- ii. Provide assistance/guidance in implementing the Programme Learning System;
- iii. Coordinate surveys and case studies to assess achievements and outcomes of SCRIP activities;
- iv. Develop a multi-stakeholder communication strategy along the seasonal performance of the programme including a portal for web-based feedback of beneficiaries, private sector partners and county administrations ;
- v. Coordinate the dissemination of the findings from the impact assessment studies.
- vi. Foster partnerships for broader knowledge-sharing and learning;
- vii. Oversee communication support to awareness raising and sensitization of programme participants; and,
- viii. Contribute to the preparation of the AWPB and progress reports

Media and Communication

- i. Support advocacy campaigns through providing evidence of programme impact gathered through the M&E system;
- ii. Develop various “documentaries” / case studies, etc, together with Knowledge Management officer at the beginning, and till end of the Programme to document the change and share it with wider stakeholders and communities.

Qualification, Skills and Experience Required.

Masters degree/BSc. BS Hons. in Public relations, Communications, marketing or related field. At least 5 years of relevant work experience in the field of communication, marketing and/or communications sectors. Prior experience of developing communication strategy /framework for the private /government organization will be highly preferred. Candidates having prior experience of development communications or working with international /donor funded projects will be given preference. Excellent communication (oral and written) and presentation skills. Outstanding organizational and planning abilities with the ability to handle and prioritize multiple tasks and relationships. Proficient command of English and Urdu. Fluency in Sindhi language will be an advantage. Competent in the use of computer and internet software, use of desktop publishing software.

TORs: Procurement Specialist, PMU

Assignment Details	
Assignment Title	Procurement Specialist, PMU
Geographic Coverage	Three Coastal districts
Project	Sindh Coastal Resilience Project (SCRP)
Project Office	Project Management Unit, Karachi
Duration	Project life
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Karachi
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p> <p>Scope of Work:</p> <p>The Procurement Specialist will report to Project Director and will also support and oversee procurement across all components and sub-components. He/She will be overall responsible for the procurement of goods, works and services and ensure compliance with Sindh/PPRA Rules and Regulations and ensure due diligence to comply with IFAD Procurement Handbook and Guidelines</p> <p>Role and responsibilities:</p> <ol style="list-style-type: none"> a) Work closely with Government Line Departments to develop quarterly/annually procurement plans to ensure timely availability of the products for project activities b) Preparation of Project’s Annual Procurement Plans, as part of Project’s AWP/B, for approval of Project Steering Committee and IFAD No Objection. c) Ensure that goods, works and services financed have been procured in accordance with the loan agreement and the IFAD Procurement guidelines; d) Installation of appropriate procurement systems and procedures for effective planning and monitoring of procurements under the project; 	

- e) Communicate to all implementing entities and service providers their responsibilities and requirements with respect to procurement, according to guidelines with prevailing government practices as well as IFAD.
- f) Conducts entire cycle of a procurement including procurement packaging, project's general procurement notices (GPN), maintenance of the Register of Expression of Interest, analysis of bids, preparation of purchase orders etc.
- g) Ensuring the timely inventory coding and safe keeping of the goods purchased.
- h) When the prior review of the bidding or proposal document is required, submits the document through the Project Director to IFAD for its review and 'No Objection'.
- i) Ensure that all the due tendering processes are adhered to: sufficient publications, strict adherence to deadlines, transparency in communications, publication of bid results, etc.;
- j) Train staff to prepare and update the Annual Procurement Plan (including procurement method, types/kinds, quantity, value, delivery requirements, sources, etc.);
- k) Prepare Procurement Notices, Expressions of Interest, Request for Quotations, Terms of References, Contract Agreements for Goods, Works and Services and have them published locally (Newspapers, websites) and were appropriate internationally,
- l) Preparing Bid documents (Request for Proposals) for the procurement of goods, works and services;
- m) Review solicited and unsolicited offers and quotations received to verify goods, quantities and services are reasonable and correct and comply with applicable IFAD Regulations;
- n) Resolves problems and protests concerning bid solicitations, contract awards or contract performance as the need arises. Addresses unauthorized purchases. Convey decisions both verbally and in writing referencing law and policy.
- o) Ensure IFAD acceptable record keeping in procurement;
- p) Prepare bi-annually progress reports with implementation of the procurement plan, and regularly inform the PD of problems and make proposals to overcome bottlenecks;
- q) Ensure that all contracts are entered in IFAD online IFAD Client Portal (ICP-CM) System and update on a regularly basis.
- r) Track and evaluate vendor performance and improvements related to pricing, contractual terms, and/or scope of services.
- s) Supervise the procurement products including materials, promotional items, grants goods, etc.
- t) Organize a database of suppliers and contractors and maintain a sound procurement filing system containing all procurement records for further review by the Fund and auditors.
- u) Review all contracts (for product and/or service procurements) to ensure quality standards are met, prior to submitting for review and approval.
- v) Must have excellent experiences of procurements/contractual agreements, compliance to the donor's requirement.
- w) Outsourcing (supplies and services), both from local and international markets.
- x) Work with suppliers/agencies in the selection of the most qualified and cost-effective vendors
- y) Any other task assigned by the PD.

Qualification, Skills and Experience Required.

A Master's degree in (Supply Chain Management, Accounting, Finance or Business Administration Law, Procurement, Economics), experience of working with national and international organization with similar tasks (minimum 5 years), proficiency in computer skills, and minimum 15 years of experience in a similar role in project of comparable size and complexity.

TOR: M&E Specialist, PMU

Assignment Details	
Assignment Title	M&E Specialist
Geographic Coverage	Three Coastal districts
Project	Sindh Coastal Resilience Project (SCRP)
Project Office	Project Management Unit, Karachi
Duration	Project life
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Karachi
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p>	
Scope of Work:	
<p>The position will report to the PD and the incumbent shall work very closely with the other managers to establish, coordinate for, and effectively run M&E system. Learning and communication systems shall be integral part of the M&E system at SCRCP Project. The M&E system will link five functions: output and outcome M&E, IFAD Results and Impact Management System (RIMS), M&E, learning and adaptation for continuous improvement of performance; internal (PMU) and external (stakeholders) communication; innovation and experimentation; and information management.</p>	
Role and responsibilities:	
<ul style="list-style-type: none"> iii. Developing the reporting system for monitoring and evaluation of programme activities and preparing regular reports on implementation progress, performance and impact of operations; iv. Set up term of reference and conduct studies to assess the impact of the programme v. Organization of training on M&E for members of the PMU, implementing partners, and providing technical backstopping to implementing agencies for preparing the AWPBs and for compliance with reporting requirements; vi. Establishment of GIS mapping of each site and a Programme Baseline Survey; vii. Development and implementation of the programme M&E and Learning system; viii. Development of M&E action plan; ix. Develop associated Management Information System for managing data and information for overall monitoring, and for the collection and analysis of data on programme achievements and impact, based on a set of gender disaggregated indicators in line with the programme logical framework and stakeholders' information needs; 	

- x. Organization and supervision of focused baseline surveys at the beginning of the programme;
- xi. Coordinating the preparation and monitoring the implementation of the AWPB;
- xii. Ensuring that all participating institutions keep records on their activities and feed this information into the Programme Learning System;
- xiii. Support PMU in providing real-time information on project's progress for the Project Steering Committee, supervision missions and evaluation; review relevant documents along with preparing management response as necessary.
- xiv. Prepare an action plan for an information sharing mechanism and dissemination of results.
- xv. Maintain project's Management Information System (MIS), ensure dashboards are up to date and reflect the needs of the PMU.
- xvi. Develop and update frameworks, guidelines and tools related to planning, monitoring, results measurement, evaluation, information and knowledge management as per Donor's and Government of Pakistan's requirements
- xvii. Develop and implement and regularly update result-based M&E plan Ensure systematic data collection reflecting project's implementation progress and achieved outputs and impact.
- xviii. Ensure monitoring and evaluation of project activities to be performed by the field offices are attended and delivered in a correct and timely manner as per results framework.
- xix. Carry out annual outcome survey, impact study in line with IFAD's Core Outcome Indicator guidelines.
- xx. Ensure the Feedback and Complain Response Mechanism within the Project is in line with established procedures.
- xxi. Design a system for archiving project's documents and reports and ensure it is up to date.
- xxii. Provide support to the KM officer in drafting success stories, good practices factsheets, learning briefs and other knowledge products, using the most relevant sources of data and evidence by liaising with relevant counterparts.
- xxiii. Perform any other related tasks as assigned by the Project Director.

Qualification, Skills and Experience Required.

The candidate should have Master degree or above in social sciences, agriculture Science, Agricultural Economics, Statistics, Development Economics from well reputed university with at least 8- 10 years' experience in rural development. Experience in project management, business development using participatory approaches, implementation and project reporting required. Good writing and communication skills in English are required while fluency in regional/local languages are desired.

Work Experience:

- I. Minimum 10 years' work experience in agriculture & related fields of which at least five (05) years' of relevant professional experience in planning/design, monitoring, results measurement, evaluation, accountability, information/knowledge management, action research and reporting in an international development setting, preferably with large projects.
- II. Outstanding understanding of the results framework, log-frame and other approach of M&E
- III. Experienced in preparing Terms of Reference for hiring consultants and consultancy services
- IV. Well experienced in Database Management
- V. Prior experience in working as M&E specialist in development projects is desirable.

Key Competencies:

- I. Demonstrable knowledge and experience in working with agricultural and market development projects in Pakistan.

- II. Excellent computer literacy on Microsoft Office, particularly Excel and Access, and Kobo/ODK is required. Project, Arc/QGIS, Tableau/PowerBI, SurveyCTO, SPSS/Stata/R Studio is an asset;
- III. Excellent written and verbal communication skills in English and Urdu Ability to deliver training sessions, work effectively and collaborative with government officials and diverse range of counterparts and stakeholders with humility and act as a mentor to other component staff and director

Age:

Not more than 45 years old on the last date of application submission.

Female candidates are highly encouraged to apply.

TOR: Nutrition, Gender and Youth Specialist

Assignment Details	
Assignment Title	Nutrition, Gender & Youth Specialist
Geographic Coverage	Three coastal districts
Project	Sindh Coastal Resilience Project (SCRP)
Project Office	Project Management Unit, Karachi
Duration	Project life
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Karachi
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p> <p>Scope of Work. The SCRП Project promotes gender equality, youth empowerment and nutrition aspects in all facets of project planning, sub-project development, community level capacity building and targeting of beneficiaries and interventions. The project area has very high poverty and malnutrition rate and the situation for women in most areas is challenging in terms of empowerment, development participation and labour market opportunities. Risk assessment of sub-projects proposed by VOs, Ips and 4Ps will be examined from the perspectives of gender, nutrition and climate change aspects and suitable mitigation actions mainstreamed into planned activities to ensure compliance with IFAD's requirements. Classification and categorization of the sub-projects will be based on IFAD guidelines while implementation and compliance will be the responsibility of PMU, district offices and implementing partners. Capacity building and training of the staff of IPs and office holders of VOs and Interest Groups will be conducted to ensure they understand gender, nutrition, and climate change related requirements and ensure sufficient appropriate mitigation is built in project activities to comply with applicable requirements.</p> <p>Role and responsibilities. The Specialist will advise and support the project director and district coordinators in effective mainstreaming of targeting, gender, and social inclusion in project activities. The Specialist will assist PMU to develop a comprehensive social inclusion strategy and ensure its integration with annual work plans and budgets. The Specialist will carry out a rapid assessment of the proposed interventions as per given template to advise PMU/IPs whether to proceed further with sub-projects or not in view of the relationship of the proposed sub-projects with these broad cross-cutting parameters.</p> <p>A detailed review will follow to see whether the relevant risks have been appropriately assessed according to IFAD guidelines and then guide and advise on proper implementation. Appropriate mitigation measures will be evaluated and improvements suggested, if any. Assisting Ips and VOs for</p>	

integrating these aspects in the development of their business plans and preparation of work plans with given targets and schedules are part of the job.

The Specialist will undertake regular capacity assessment on gender and social inclusion issues in the project and assist in organizing required trainings for PMU staff, implementing partners and service providers. He/she will assist the project and Ips to design and implement appropriate processes and interventions to improve target area situation in terms of gender and nutrition. Further assist Ips in adoption of appropriate measures to encourage women participation in Interest Groups, appointment in managerial positions in VOs and Interest Groups and participation in projects asset provision and vocational and technical training activities. The Specialist is expected to establish relevant linkages with other gender, women's or social inclusion programmes implemented by national, international, and intergovernmental agencies in the project area.

Qualification, Skills and Experience Required.

The candidate should have Master degree or above in social sciences, agriculture and economics with at least 8 - 10 years' experience in rural development. Experience in project management, business development using participatory approaches, implementation and project reporting required. Good writing and communication skills in English are required while previous experience in responsible positions related to gender, youth and nutrition will be an advantage. Previous experience of working in target districts will be an added advantage.

TOR: Microfinance Specialist

Assignment Details	
Assignment Title	Microfinance Specialist
Geographic Coverage	Three Coastal districts of Sindh Province
Project	Sindh Coastal Resilience Project
Project Office	Project Management Unit, Karachi
Duration	Project life
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p> <p>Scope of Work. The SCRP is investing in improving financial inclusion of smallholder farmers, fisherfolk and landless poor in formal sources of credit to reduce their reliance on exploitative informal sources. The project is introducing a graduated scheme of subsidized credit delivery through partner banks. Project is particularly targeting disadvantaged groups like women, youth and landless poor through provision of employanle skills and development of micro-enterprises. The proposed position will help PMU to develop and roll out strategies for financial inclusion of the target groups through introduction of appropriate credit products and terms and conditions, monitor performance of the partner banks and keep track of the subsidy provision and its effectiveness.</p> <p>Role and responsibilities.</p> <ul style="list-style-type: none"> i In collaboration with SBP and microfinance and commercial banks develop the credit guarantee and interest rate subsidy scheme document ii Design templates for reports to be submitted by SBP to the Project Management Unit iii Monitor the performance of participating financial institutions relative to the limits approved and deployment of digital finance channels iv Oversee the operations of the participating financial institution in the SCRP targeted villages v Develop programmed lending financial product prototypes based on surveys / FGDs with farmers and fisherfolk. These will be shared with the participating financial institutions to be used for lending to the targeted population vi Engage with insurance companies – Takaful and conventional to develop climate risk insurance products (weather index insurance) for the SCRP farmers vii Ensure collaboration between participating financing institutions and insurance companies to design distribution channels for the climate risk insurance products viii Participate in meetings with SBP and IFAD and participating financial institutions and insurance companies 	

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|---|
| <ul style="list-style-type: none">ix Timely reporting to the SCRP Head of PMU on the required documents and reportsx Any other task required by the Head of PMU / IFAD |
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Qualification, Skills and Experience Required.

<p>The candidate should have a Master degree finance and/or economics with at least 8-10 years' experience in commercial or microfinance banks focusing on rural/agricultural finance at the head office at the senior management level. Specific experience in one or more of the following: i) financial product development, ii) design and management of digital banking channels, iii) credit risk management/policy development. Experience in stakeholder management, banking sector, microfinance product development using participatory approaches is essential. Very good writing and communication skills in English and previous experience in target districts or Sindh Province and fluency in Sindhi languages are required.</p>
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TOR: Agri value Chain Specialist, PMU

Assignment Details	
Assignment Title	Agri Value Chain Specialist, PMU
Geographic Coverage	Three coastal districts of Sindh Province
Project	Sindh Coastal Resilience Project
Project Office	Project Management Unit, Karachi
Duration	Project life
Expected Start Date	To be inserted later
Expected End Date	To be inserted later
Location	Karachi
Introduction to Assignment	
<p>The International Fund for Agriculture Development (IFAD) and Government of Sindh is financing a seven-year USD 100 million Sindh Coastal Resilience Project) in the three coastal district of Sindh province. The project is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilities access to natural resources and support services. The project consists of three mutually reinforcing components to reduce rural poverty and increase rural incomes. Project will be implemented by a Project Management Unit in Karachi under the oversight of a Project Steering Committee headed by Chairman Planning & Development Board, Government of Sindh.</p>	
Scope of Work.	
<p>Agri Value Chain Specialist will lead the development of strategy and action plan for agri-business and value chain development in target Union councils and villages. She/He will assist the project and IPs in identification of advantageous crops and products in each region for agri-business development and partnerships. The specialists will facilitate agribusiness partnerships between VOs/Interest Groups and private sector and steer the brokering and negotiations of such partnerships with stakeholders. He/She is responsible for the overall operation and management of component 1 and to closely work with the assigned service providers to ensure sound and timely implementation and coordination of the programme planned tasks to achieve the overall development goals of the SCRP. He/she is responsible to provide technical leadership and strategic direction towards agribusiness development activities and will play a key role in extension related work through the coordination with the concerned extension agencies of Provincial Government. He/She serves under the direct supervision of the Program Director.</p>	
Role and responsibilities.	
<ol style="list-style-type: none"> I. Develop standard templates and guidelines for the IPs and extension services work with VOs/Interest Groups in agri-business development plans. II. Review the plans prepared by Ips and VOs and advise PMU on their feasibility and assist IPs and VOs in improving the plans on the basis of deficiencies identified and conveyed. III. Lead capacity building activities for the extension service providers, IPs and VOs. IV. Lead negotiations with between participating VOs/Interest Group and private sector companies in developing pro-poor win-win public-private producer partnerships (4Ps); 	

<ul style="list-style-type: none"> V. Liaise with private sector, credit service providers and VOs/Interest Groups to ensure partnered market linkages are sustained for the betterment of all parties concerned in the value chain specifically rural poor farmers and farmer groups. VI. Build effective partnerships with a broad range of stakeholders in private-public partnership development including government and non-governmental institutions, civil society organizations, research organizations, academia and the private sector to overcome possible barriers in project development and implementation and to develop an exit strategy by the time of program completion. VII. Master IFAD key documents such as FA, PDR, LFA and PIM etc., in connection with business development and implementation and on operational activities and for maintaining updated PIM for the purpose of Agribusiness development work. VIII. Guide /assist participatory companies/service providers in developing business proposals and evaluation of 4P business plans with the assistance of service providers and in-house consultants and ensure business proposals are in-line with program objectives while ensuring expected out come through the proposals. IX. Liaise with Monitoring and Evaluation/Knowledge Management staff in developing monitoring tools to track output and outcome indicators in the LFA through the activities related to agribusiness development and 4P projects. X. Provide PMU staff, 4P partners, VOs management, with up-to-date professional advice on business operations, compiling management information and agricultural services and to attend overall strategic issues and provide the strategic direction of the development and implementation of partnerships. XI. Identify appropriate technologies and equipment for processing and value addition for the needs identified in VO Agri-business plans and fisherfolks plans XII. Assist PMU AWPB preparation with regard to activities in under component 1, attending to and related follow up activities and providing necessary inputs for updating AWPB and ensure targets are achieved with quality and quantity. XIII. Coordinating the selection of service providers for services required by for various agri-business plans' implementation and ensure that their work programmes are submitted, supervised and completed timely and effectively and provide recommendations for management of contracts of the service providers engaged. XIV. Undertake regular support visits to programme districts to assist programme delivery, identify gaps and support needs to ensure minimum standards are met, XV. Engage with policy related engagement with related staff and assist Program Director. XVI. Attend to administration and management work related to the Componet 1. XVII. Any other related duties assigned by the PD.

Qualification, Skills and Experience Required.

The candidate should have Master degree or above in Agriculture and economics/Business management with at least 8 - 10 years' experience in agriculture and rural development. Experience in project management, business development using participatory approaches, implementation and project reporting required. Good writing and communication skills in English are essential while previous work experience in target districts and fluency in Sindhi languages will be an advantage.

Annexure-2: Outline of Rapid Village Diagnostic

1. Study Findings and Discussions
 - 1.1. Ecosystem profile: status of natural resources, biodiversity and ecosystem
 - 1.2. Production Profile: agro-climatic conditions, cropping pattern (including current pest management fertilization and climate adaptation practices), geographic profile, , total current volumes of trade, market channels and its shares, growth trends for the last 5 years and benchmarking (yield, profits, quality, post-harvest loses, value addition/transformation rates etc.)
 - 1.3. Village Profile: Geographic profile, socio-political background, farmers and land details, landless poor and means of livelihoods, youth, socio-economic infrastructure profile and main deficits, processing and value addition facilities available/needed, presence/absence of tangible cultural heritage
 - 1.4. Presence/absence of Community/village organization; promising entry points for project for organizing farmers
 - 1.5. Landholding patterns, average landholdings and number of large land owners and area
2. Key Conclusions and Recommendations

Annexure-3: Detailed checklist of factors for baseline study

1. Methodology and Analytical Framework/Design
2. Sampling size and technique
3. Database Development
 - a) General Information – unique identification number (CNIC) and contact mobile phone numbers (at least 2 contact numbers per HH), demographics (disaggregated data), household size, members and details of occupation and incomes, dietary diversity/nutrition, food security etc.
 - b) Economics of Agriculture – Costing, input and output ratios, yields and current productivity
 - c) Production – Quality and quantity of inputs, technological levels, input suppliers and vendors, seasonality of production, availability and tied sales
 - d) Financial Aspects – Sources, terms and conditions, interest and existing outstanding, access to government programs
 - e) Risk Aspects – Historical risks, computation of losses due to risk, coping mechanisms
 - f) Marketing Aspects – Channels of marketing, margins and costs at various levels, quality aspects, price sensitivity, seasonality of markets, alternate market structure
 - g) Best Practices
 - h) Constraints and Challenges
 - i) Prospects and Opportunities

Annexure-4: Umbrella Village Plan

1. Name of the Village:
2. Union Council
3. Taluka:
4. District:
5. Distances:
 - i. From Taluka HQ:
 - ii. From District HQ
 - iii. From nearest main Mandi:
6. Demographic Profile:
 - i. Population
 - ii. Households:
 - iii. Women headed HHs
 - iv. BISP beneficiary households
 - v. Youth Nos (18–29-year-old) (male) (female)
7. Economic Profile:
 - i. Number of farming households
 - ii. Landowners
 - iii. Tenants
 - iv. Sharecroppers
 - v. Agriculture based wage workers
 - vi. Landless HHs with other vocations
 - vii. Others:
8. Total Agriculture Land area:
 - Irrigated
 - Non-irrigated
 - Saline
 - Waterlogged
 - Other
9. Landholding Pattern:
 - i. Households with over 25 acres
 - ii. HHs with holding between 15-25 acres
 - iii. HHs with holding between 5-15 acres
 - iv. HHs with less than 5 acres
10. Cropping system and land usage:
 - i. Main crops and acreage (including crop rotation over season)
 - ii. Per acre average yield of main crops
 - iii. Pest management practices
 - iv. Fertilization management practices
 - v. Ecosystem infrastructures
 - vi. Climate change impacts and possible adaptation strategies in cropping system
11. Livestock
 - i. Nature and quantity of animals per HHs

- ii. Access to fodder and feed
 - iii. Access to water
 - iv. Access to improved breed
 - v. Access to veterinary services
12. Current functioning of ecosystem and ecosystem services and role of local communities
13. Current produce marketing system
14. Current input supply system:
 - i. No of HHs procuring from market on cash
 - ii. No of households procuring from Arhti on credit
 - iii. Terms of Arhti credit:
15. Sources and status of agri-credit availability:
 - i. No of households availing agri-credit
 - ii. Terms of agri-credit:
16. No of tractors in the village:
17. Processing & Value Addition Equipment available: Type and numbers
18. Processing and value addition equipment needed but not available:
19. Processing and value addition infrastructure available:
20. Processing and value chain infrastructure needed but not available:
21. Socio-Economic Infrastructure:
 - i. Farm to market road
 - ii. Safe Drinking water availability
 - iii. Electricity
 - iv. Toilets
 - v. State of irrigation
 - vi. State of drainage and flood protection
22. Current gaps in availability of above infrastructure and VO priorities:
23. Rough estimates of quantities and budgets for priority missing Infrastructure:
24. Main challenges for landholders in increasing incomes:
25. Main challenges for tenants and sharecroppers in increasing incomes:
26. Main challenges for landless poor in increasing incomes:
27. Main challenges for sustainable and climate-resilient agriculture and livestock:
28. Main challenges for youth in increasing incomes: (for females) (for males)
29. Status of nutrition and main challenges in nutrition outcome improvements:
30. Status of gender and youth empowerment and main challenges:
31. Climate change impacts and possible mitigation measures at village level:
32. Broad division of interest groups in the village: Types and number of households in each
33. Potential opportunities for increasing incomes of each type of Interest Group: List of groups with membership attached

Annexure-5: Interest Group Business Planning Format

1. Executive Summary	<ul style="list-style-type: none"> Overall snapshot of the proposed intervention
2. Introduction	<ul style="list-style-type: none"> Overall introduction to the project (Details of selected village/district, demography, household details, existing value chains, proposed interventions and outcomes etc.)
3. Brief on Interest Group	<ul style="list-style-type: none"> Composition with individual asset base Current production, marketing and performance
4. Climate Resilience	<ul style="list-style-type: none"> Current climate change related challenges and their impact on target groups and their production and productivity
5. Proposed Intervention (Business)	<ul style="list-style-type: none"> Details of selected area & value chain with specific details Rationale for selection Project activities (cultivation and climate-smart practices*, catchment and sustainable fishing**, value addition, training and procurement etc.)
6. Market Assessment and strategy	<ul style="list-style-type: none"> Existing scenario, product standards and practices. Market and Marketing Proposed for the business model Marketing Plan
7. Institutional Support	<ul style="list-style-type: none"> Role of banks/PFIs, Government departments and private sector
8. Risk Analysis	<ul style="list-style-type: none"> Perceived risk and mitigation plan considering probability of occurrence and severity of the impact
9. Youth, Gender & Nutrition inclusion	<ul style="list-style-type: none"> Details on how the proposed intervention supports youth and promote gender equality and nutrition sensitivity
10. Proposed Financials	<ul style="list-style-type: none"> Project contribution summary considering IG/VO and project investment Overall cash flow summary with financial indicators (Ex: FIRR, NPV and payback period etc.) Sensitivity analysis
11. Exit Strategy	<ul style="list-style-type: none"> Details on project sustainability and the continuation after project completion.
12. Annexures and supporting documents	<ul style="list-style-type: none"> Basic cost/benefit analysis List of IG members with CNICs and asset base of each member Activity plan Compliance with ESCMP (are the mitigation measures developed in ESCMP in place (see Annexure-11: Environmental, Social and Climate Management Plan (ESCMP)) Monitoring & Evaluation plan Fund disbursement plan with milestones

* Soil fertility and crop protection will receive special attention. As part of a participatory approach, farmers will be asked to explain their current practices (need analysis, inputs used, quantity, supplier,

spraying methods and equipment). Soil and water analyses are suggested to complete this survey. Based on this understanding, shared with Interest Groups, farmers will then be trained on the importance of organic matter, sustainable soil fertility management and integrated pest management (including intercropping, crop rotation, legumes, biocontrol biopesticides, composting, agroforestry). While a system approach will be adopted, IPs (and their partners) will guide farmers with gradual improvement over three cycles of production. Landowners will be invited to specific session to understand the benefit of such practices in terms of long-term productivity. Correlations between land agreements and climate-smart agriculture practices will be made encouraging landlords to propose medium/long-term land agreement. If so, IPs (and their partners) will support the adoption of such agreement, considering the lesson learn by the FAO “Improved Land Tenancy in Sindh Province” (<https://www.fao.org/3/cc2179en/cc2179en.pdf>).

****** In fishing sector, fisherfolk communities will be systematically trained in risks of overfishing and destruction of coastal habitats. Mangrove restoration programme (such as the ADB supported one) will provide opportunities to insist on ecosystem services and role of local communities. Equate equipment and respecting closure periods and zones to avoid the capture of juveniles and reduce by-catch and discards will be discussed with fisherfolks. New fishing gear, low-cost fish aggregating devices, more fuel-efficient boats, selective nets, aquaculture will be promoted.

PMU is invited to consider the IFAD How to do note Fisheries, aquaculture and climate change (https://www.ifad.org/documents/38714170/40193852/htdn_fisheries.pdf/f90cd92b-d68e-4be3-b413-42fce49eb376)

Annexure-6: Template for Expression of Interest (EOI/Concept Note) Stage

1. Applicant Details													
Full Legal Name													
Company registration number (where applicable)													
Legal Structure	<p>Please select the most appropriate alternative that applies to your organization with an "X" from the following, and provide particular information where requested.</p> <p><input type="checkbox"/> Public Quoted Limited Liability Company</p> <p><input type="checkbox"/> Public unquoted Limited Liability Company</p> <p><input type="checkbox"/> Private Limited Liability Company</p> <p><input type="checkbox"/> Company Limited by Guarantee</p> <p><input type="checkbox"/> Company Limited by Association</p> <p><input type="checkbox"/> Co-operative Society</p> <p><input type="checkbox"/> Farmer Based Organization ('Societies')</p> <p><input type="checkbox"/> Partnership; No. of Partners:</p> <p><input type="checkbox"/> Sole-proprietorship</p> <p><input type="checkbox"/> Other (Please specify)</p>												
Property Rights	<p>Please select the most appropriate alternatives that applies to your organization with an "X" from the following:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Land</td> <td style="width: 15%;"><input type="checkbox"/> Owned</td> <td style="width: 15%;"><input type="checkbox"/> Leased</td> <td style="width: 37%;"><input type="checkbox"/> Rented</td> </tr> <tr> <td>Buildings</td> <td><input type="checkbox"/> Owned</td> <td><input type="checkbox"/> Leased</td> <td><input type="checkbox"/> Rented</td> </tr> <tr> <td>Plant/Machinery</td> <td><input type="checkbox"/> Owned</td> <td><input type="checkbox"/> Leased</td> <td><input type="checkbox"/> Rented</td> </tr> </table> <p>If property is leased or rented: Period of lease/rent contract:</p> <p>If property is leased: Name of the financial institution/s:</p>	Land	<input type="checkbox"/> Owned	<input type="checkbox"/> Leased	<input type="checkbox"/> Rented	Buildings	<input type="checkbox"/> Owned	<input type="checkbox"/> Leased	<input type="checkbox"/> Rented	Plant/Machinery	<input type="checkbox"/> Owned	<input type="checkbox"/> Leased	<input type="checkbox"/> Rented
Land	<input type="checkbox"/> Owned	<input type="checkbox"/> Leased	<input type="checkbox"/> Rented										
Buildings	<input type="checkbox"/> Owned	<input type="checkbox"/> Leased	<input type="checkbox"/> Rented										
Plant/Machinery	<input type="checkbox"/> Owned	<input type="checkbox"/> Leased	<input type="checkbox"/> Rented										
Type of Business Operation	<p>Please select the most appropriate alternative that applies to your organization from the following:</p> <p><input type="checkbox"/> Manufacturing</p> <p><input type="checkbox"/> Services</p> <p><input type="checkbox"/> Processing/Packaging</p> <p><input type="checkbox"/> Distribution</p> <p><input type="checkbox"/> Other. Please specify:</p> <p>.....</p> <p>Please specify the products manufactured / services offered /items processed or packed / distributed:</p>												

Contact person	
Gender (for Individual applicants)	
Age (for Individual applicants)	
Official (registered) address	
Postal address (for correspondence)	
Telephone number	
Email address	
Type of business	
Year operations started	
Number of staff	
Management and organization capacity Clearly describe the management, organizational and financial capability you have to implement this project.	
2. Enterprise/Individual Operation or Activity Details	
Title of the proposal:	
Estimated new employment opportunities:	
<p>Problem Definition: Clearly describe the specific problem your project is trying to address. Explain how solving/alleviating this problem will increase the income of smallholder by minimum 30% from the current situation and your income. (Maximum 300 characters).</p>	
<p>Describe your project idea to address the problem stated above. Please detail the specific objective(s) of this project, including targeted beneficiaries and/or area that you plan to reach during implementation. (Maximum 500 characters).</p>	
<p>Project Implementation: How will you implement your project idea? Describe the concrete steps or major activities that the project will undertake to meet your objective(s). Include the length and scope of each major activity. Explain the status of the idea: Is this a brand-new idea or has the idea already been tested or piloted? Has a feasibility study been conducted? (Maximum 700 characters).</p>	

Marketing & Distribution: Describe current status on target commodity in market and potential towards local and export market. Provide details of an end market analysis conducted so far? (Context, channels, customers, competitors, communication and choices).
Results: Please state the tangible expected results of your project and its direct impact on improving outcomes for the targeted beneficiaries/area. Provide estimates of the number of farmers that your project will benefit. (Maximum 300 characters).
Measurability: Describe the specific method(s) and indicators that will be used to measure project success and implementation. Indicators should demonstrate that project objective(s) described above. (Maximum 300 characters).
Sustainability and Resilience (Environment and Climate): How does the project improve the climate resilience of the Interest Group and Value Chain? What are the foreseen impacts of project on ecosystems? (Maximum 300 characters).
Sustainability (Organizational and Financial): What characteristics of project will ensure that it is sustainable? Describe any major challenges that project faces and how it will be overcome. (Maximum 300 characters).
Proposed Investment/ Budget (clearly identifying the items or activity being financed by the Private sector, Producers and the SCRCP project). Note: The SCRCP can partially finance on-farm investment for producers, market linkage or primary processing.

For SCRCP use only:

Date application received:

Name and signatures of the receiving official:

Checklist - EOI Submission & Eligibility

S. No	Required Documents	Checkbox
1	EOI submission cover letter	<input type="checkbox"/>
2	EOI submission form	<input type="checkbox"/>
3	Copy of registration certificate (number of years since registration should not be less than 2 years)	<input type="checkbox"/>
4	Detailed profile of the applicant organization along with the details of agribusiness activities together with contact details of all major agribusiness suppliers/producers and customers during the last three years	<input type="checkbox"/>
5	Last two years audited financial statements (must have unqualified opinion of the auditors)	<input type="checkbox"/>
6	Bank statement for last one year	<input type="checkbox"/>
7	List of board members (if any) and key management together with qualifications thereof	<input type="checkbox"/>
8	Company organogram	<input type="checkbox"/>
9	Particulars of physical address in Pakistan or abroad (In case of a multinational company) with contacts in full details	<input type="checkbox"/>
10	Tax liability and adherence	<input type="checkbox"/>
11	Proposed investment plan	<input type="checkbox"/>

12	Time frame of implementation and proposed fund requirement plan	<input type="checkbox"/>
13	Tentative list of target provinces together with target number of farmers with which the company intends to establish partnership.	<input type="checkbox"/>
14	Proof of working with smallholder farmers in past with success	<input type="checkbox"/>
15	Realism of the project in terms of climate resilience	<input type="checkbox"/>
16	Recommendation	<input type="checkbox"/>
17	Any additional document attached, please specify	<input type="checkbox"/>

For SCRP use only:

All the required documents are attached: Yes No

Comments: _____

Name, designation and signatures of reviewing officer: _____

Date: _____

Annexure-7: Template for 4P proposal development

Executive Summary

A typical business plan begins with an executive summary that is prepared after the plan is written. The purpose is to communicate the plan in a convincing way to important audiences. Summary of project objectives, outputs, outcomes, budget and financial viability need to be included.

Introduction/background of the promotor

A summary of the business activities of the company/FO (Promotor), history and the position in the marketplace should be provided here. This part gives an overview of the promotor, its vision and objectives, including the following elements:

1. Presentation of the promotors
Creation date, geographic area, number of members (FO), types of commodities/products, plot size operated by each farmer member, number of staff (Company), ongoing services provided by the promotor, property, equipment and infrastructure.
2. Focus and overview of the business the promotor is aiming to develop within its business plan.
3. Climate vulnerability
The promoter analyses the impact of climate change on the business (production and consumption) and anticipate the necessary adaptation
4. Vision and mission
The vision is what the promotor aspires to and what it will concentrate its energies and resources on to make the business profitable. The mission is to be achieved through the objectives of the promoters' business plan.
5. Objectives/goals
This section includes production and/or financial-related objectives specific to the plan. Objectives should be SMART (Specific, measurable, achievable, realistic and time bound)

Production, Market & Supply Analysis

1. Brief introduction on the current market for the product that the promotor is focusing on in the country/region/sub region: current marketing and pricing systems, potential buyers of produce.
2. Brief introduction on the type of product targeted by the promotor (conventional sector, organic, fair trade, raw, processed, etc.).
3. Areas to improve efficiency of marketing system: what are the potential areas where the promotor could improve efficiency and reduce the costs of the current marketing system (transport, processing, etc.)?
4. Possibility of market development: what is the potential for the development of new markets? Is there potential for the promotor to directly market produce nationally, internationally, etc.? If there is, would this be a more profitable option?
5. Current Farming, fishing and agro-processing practices: crop production; pest management (use of chemical pesticides and biopesticides in quantity and quality); soil fertility strategy (use of including organic and chemical fertilizers in quantity and quality, soil analysis including organic matter); water management (water logging, irrigation in volume and quality, field laser leveling, water harvesting/storage system), innovative/sustainable practices (crop rotation, agroforestry, intercropping, biocontrol, soil cover, use of agrometeorological services, use of soil analysis), food losses (volume and recovery); feeding, animal health and breeding (for livestock, poultry and aquaculture); input provision (self-production, local provision, quantity and quality); power energy; by-products (recovery and disposal); occupational safety risks; land access/land tenure; access to services.

Evaluation of climate sensitivity, challengea and current adaptative strategies and practices.

What are the main areas for improvement and how farmers can contribute to and manage these changes?

6. Current produce volumes and prices from potential membership/dealership or contract farmers: what prices are members/contract farmers/dealers receiving for produce, who they sell produce to (in case of FO), what are transport arrangements etc.
7. Current buyers of crops/finished products produced by potential members/processor/company: who are the key buyers of produce/finished products, what are the 'links in the chain' after the initial purchase is made.
8. Current volume of input purchase, current suppliers of inputs, prices of inputs, input supply marketing channels, current quality of input purchase.
9. Current assets and equipment (warehouses, production and/or processing equipment belongs to the promotor).
10. Characterization of the FO/company business partnerships with buyers, types of contracts, price, quantity, etc.
11. Differences between sales through the FO and sales without involvement of the FO (prices, terms and conditions, etc.).
12. SWOT analysis of the ongoing capacities of the FO/company (diagnostic elements) to manage its economic services in relation to the planned business in terms of:
 - Production
 - Processing of products
 - Marketing
 - Export
 - Certification
 - Financial management
 - Administration
 - Management

Important: Most recent statistics need to be included with source of data. This assessment will be based on consultation with farmers and agro-processors (participative approach to reflect on current practices, bottlenecks, and opportunities).

Value Chain Analysis:

Comprehensive value chain analysis needs to be included (Diagram) considering all actors and their role. In addition, identify the positives/gaps/loopholes at each stage and influencers accordingly (Table).

Function/VC Layers	Actors	Supports/Discourages	Influencers

Proposed Partnership

1. Project goals & objectives

Goals are high level statements that provide overall context for what the partnership is trying to achieve, and should align to SCRP/IFAD goals. Objectives are lower level statements that

describe the specific, tangible products and deliverables that the partnership will deliver within a time frame.

2. Problem Identification

Problem Statement/Partnership Rationale is a brief analysis or summary of the problems identified relating to the partnership or issue to be addressed by the intervention. It has to be precise and point-to-point basis.

3. Project Solution for the problem

This related to the problem identification and should highlight how the intervention can address the identified problem.

4. Project outputs

This section should present the desired outputs expected through the partnership and should be measurable.

5. Project Beneficiaries

The target group should comprise of smallholder farmers (with land holdings below 2 Ac and rely on agriculture for at least 50% of their household income), with special focus on women and landless, especially the youth. However, to provide assurance for steady and adequate supply to reach the demand, 20% could be accommodate from the upper bracket of the poor to have sustainable value chains. Further, indirect beneficiaries need to be specified with their specific roles in the partnership.

6. Project geographical coverage

The programme is entitled for national coverage, though special attention and preference would need to be given to low-income districts and where Agri-production potential is high. Please include Provinces, Districts and DS Divisions accordingly.

7. Project overall benefits

This should emphasize the overall benefits to smallholder beneficiaries, promotor and country as a whole.

Proposed activities and investment

1. Detailed description of the planned activities (training, extension service, equipment, partnership). Activities aim to support sustainable productivity that is resilient to climate change and market opportunities that benefit farmers.
2. Cost table: Contribution from each partner of the partnership (Promotor, SCRP, Farmers etc.).
3. Activity plan: Timeline to implement proposed activities. Ideally through a Gannett chart.
4. Fund requirement plan: This should be aligned with activity plan.
5. Training and extension service plan: In this section, it is expected to highlight how promotor is planning to monitor and support beneficiaries during the implementation of the project. (Ex: How many staff, number of visits per beneficiary/month etc.)
6. Monitoring & evaluation plan: This should explain how promoter would monitor and evaluate the implementation of the partnership together with PMU. This could be through PMU staff (Field officer) or with the support of government officers as well.

Financial analysis

1. Financial assumptions with and without additional investment
2. Financing requirement for production.
3. Valuation of business (evaluation of in-kind contribution)
4. Calculation of net present value and internal rate of return
5. Financing plan and cash flow estimation.
6. Sensitivity analysis (If needed)

Important: Financial analysis should be done for sub models separately and entire project as a whole as well.

Risks analysis

Categorize risk factors (See the below chart) involve in the proposed project according to probability of occurrence and the severity (Impact) with a scale to be included in the matrix as given below. The risk mitigation step involves development of mitigation plans designed to manage, eliminate, or reduce risk to an acceptable level. Once a plan is implemented, it is continually monitored to assess its efficacy with the intent of revising the course-of-action if needed.

Simple Risk Matrix

	Consequences		
Likelihood	Minor	Moderate	Major
Likely			
Possible			
Unlikely			

Risk Treatment Key

Intolerable Risk Level. Immediate action required
Tolerable Risk Level. Risks must be reduced so far as is practicable.
Broadly Acceptable Risk Level. Monitor and further reduce where practicable.

Gender equity, youth and social inclusion strategies

This sector should include how to transform and distribute of opportunities, choices and resources available to women and men so that they have equal power to shape their lives and participate in the process of value chain and the proposed partnership.

Further, social inclusion refers to the process of improving the conditions of disadvantaged individuals and groups - such as youth, victims of natural disasters, indigenous peoples, or other vulnerable communities to be included in the partnership.

Annexure-8: Scope of work and Evaluation Criteria for 4P

General

- To evaluate the submitted proposals by proponents under broader criteria given below, highlighting the feasibility of implementing of the partnership.
 - Overall concept
 - Social feasibility
 - Environmental feasibility and Climate adaptation
 - Marketing & technical feasibility
 - Economic & financial feasibility
 - Legal feasibility
 - Management & schedule feasibility
 - Overall sustainability
- Carry out the feasibility at the ground level to support the evaluation pointing out practical scenarios which prevails in current context.
- To provide recommendations to program management with justifications highlighting the feasibility of the partnership to be implemented and to suggest improvements, corrective actions to fine tune the proposals.
- To scrutinize the items included in investment plans of the proposals including capital assets (equipment, machineries and construction work etc.) and working capital (seeds, fertilizer, agrochemicals, organic supplies, etc.) under below criteria:
 - Value for money (cost)
 - Quality
 - Suitability
 - Comparison with alternatives
 - Availability
 - Efficiency & effectiveness
- To assist and advice proponents to resolve any policy, legal, environmental matters which may arise during the implementation.
- Coordinate and interact with relevant staff of program management unit (PMU) and proponent to conduct the evaluation successfully.
- Review the internal appraisal compiled by the PMU and provide recommendations to program management to fine tune it.

Committee Team Leader

- Organize and lead the overall evaluation. Provide oversight to the evaluation throughout the entire evaluation cycle. Be the point person to liaise with program management.
- Ensure a thorough review and analysis of the proposal and other available secondary data by the appropriate committee members.

- Lead the selection of a purposively selected sample of implementation sites and outputs for proposed intervention.
- Ensure the final report is logical and presented in a way that clearly separates the evidence collected, conclusions, and recommendations in different sections of the report, and that conclusions and recommendations are based on the evidence presented in the report and adequately supported by information gathered through the evaluation.
- Serve as a technical specialist for a specified sector (optional) as long as it does not affect her/his performance in his/her primary committee leadership role.
- Coordinate and interact with relevant staff of program management unit (PMU) and proponent to conduct the evaluation successfully.

Technical/subject related specialists

- Interact with committee to provide expertise & insights on relevant fields to conduct the evaluation successfully.
- Provide primary and secondary data on relevant specialized field to support the evaluation conducted by the committee.
- Link committee with relevant specialized field institutes/organizations to get relevant information or any other specific requirement arise during the evaluation.
- Assist and guide the proponent to enhance the proposal with the expertise in specialized technical areas of the proposed intervention.

Annexure-9: Score card (Business Proposal Evaluation Committee)

Category	5	4	3	2	1	Remarks
Overall concept						
Relevance for national priority						
National contribution (Import substitution/export oriented)						
Geographical coverage (rural/urban)						
Viability of the partnership in long run						
Overall perception towards the beneficiary commodity/produce						
Total (Out of 25)						
Social Feasibility						
Impact on rural livelihood system, vulnerability and resilience						
Woman/youth participation & gender aspects						
Impact on cultural norms & beliefs in project locations						
Existence of active farmer groups/societies						
Existence and operation of established social enterprises						
Willingness to act/form as a community/group to share mutual benefits						
Impact on direct & indirect employment generation						
Nutrition focused/sensitivity aspects						
Public opinion (General perception of the community)						
Total (Out of 45)						
Environmental Feasibility and Climate Adaptation						
Impact on effective reduction of waste toxicity, mobility & volume						
Impact of the project on the environment and ecosystem						
Incorporation of ecofriendly practices						
Incorporation of climate resilience practices						
Total (Out of 20)						

Category	5	4	3	2	1	Remarks
Marketing & Technical Feasibility						
Ability of promoter to convert farmer produce to end products with desired technology						
Ability of promoter company to transfer/disseminate appropriate technology to beneficiaries.						
Accessibility to raw materials and their quality/price						
Availability of markets for outputs/end products and the expected prices for these outputs.						
Availability of various services related to the project (i.e., extension)						
Availability of land/water/roads and other infrastructure to the project						
The costs of transporting inputs and outputs to the project's location (i.e., the distance from the markets)						
Total (Out of 35)						
Economic & Financial Feasibility						
Total estimated cost of the project.						
Financing of the project in terms of capital structure, debt to equity ratio and promoter's share of total cost.						
Existing investment by the promoter in any other partnerships.						
Projected cash flow and profitability of beneficiaries (NPV & IRR)						
Availability/willingness of banking partner for credit facilities						
Ability of beneficiaries to contribute to total investment (Working capital)						
Willingness of beneficiaries to obtain credit facility through a bank						
Total (Out of 35)						
Legal Feasibility						
Impact on overall protection of public, environmental health, national heritage & protected areas						
Approval of relevant authorities/legal bodies for implementation and approval						

Category	5	4	3	2	1	Remarks
of the concerned institutions for license (Statutory compliance)						
Total (Out of 10)						
Management & Schedule Feasibility						
Managerial capability of promoter company (Proper down the line structure and availability of staff at ground level).						
Past experience in value chain development partnerships in relation to donor funded projects.						
Past experience in successful agribusiness venture and reputation						
Profitability and liquidity of the promoter company.						
Overall feasibility of completing the project within stipulated action plan proposed by the promoter company						
Overall commitment and interest towards the partnership						
Total (Out of 30)						
Overall (Out of 200)						
Additional Comments:						
Name of the committee member:						Total Score (Out of 200):

Annexure-10: Indicative list of sector-wise training under component-2

Sr. No	Trade	Sector
1	MASONRY	CONSTRUCTION
2	CARPENTER	
3	STEEL FIXER	
4	TILE FIXER	
5	BUILDING ELECTRICIAN	
6	WELDING	
7	PLUMBING	
8	ROOF CEILING	
9	AC & REFRIGERATOR MECHANIC	
10	RECEPTIONIST	HOSPITALITY
11	COOKING/CHEF	
12	BAKERY PRODUCTS	
13	WAITERING SERVICES	HEALTH CARE
14	MEDICAL STORE ATTENDANT	
15	DISPENSER TRAINING	
16	LAB ATTENDANT	AUTMOBILE THEME
17	AUTO MECHANIC	
18	AUTO ELECTRICIAN	
19	CAR AC REPAIRING	
20	TRACTOR REPAIRING /PETER ENGINE REPAIRING	
21	DENTING AND PAINTING	
22	MOTOR CYCLE REPAIRING	
23	HEAVY MACHINERY OPERATION	
24	HOME APPLIANCES REPAIR	
25	MOBILE PHONE REPAIRING	
26	CAR DRIVING	GARMENTS
27	TAILORING	
28	HAND & MACHINE EMBROIDERY	
29	BABY GARMENTS	
30	APPLIQUE WORK & RILLI MAKING	
31	ADDA WORK	
32	CHESTER MAKING	
33	BLOCK PRINTING	INFORMATION TECHNOLOGY
34	COMPUTER HARDWARE	

35	COMPUTER SOFTWARE	
36	MOBILE PHONE APP DEVELOPMENT	
37	SOFTWARE DEVELOPER	
38	GRAPHIC DESIGNING	
39	AUTO CAD	
40	WEB DESIGNING	
41	LEATHER WORK AND HANDICRAFTS	ARTS AND CRAFTS
42	HAND BAG MAKING	
43	JEWELRY MAKING	
44	HAND KNITTING WORK	
45	BLUE POTTERY	
46	CERAMICS / KASHIGARI / BLUE POTTERY (OLD MULTANI CULTURE ART)	
47	HANDY CRAFT	
48	BEAUTICIAN	PARLOR MANAGEMENT
49	HAIR DRESSER	

Annexure-11: Environmental, Social and Climate Management Plan (ESCMP)

Sindh Coastal Resilience Project

Social, Environmental and Climate Assessment Procedures (SECAP)

VI. **Environmental, Social and Climate Management Plan (ESCMP)**

March 2024

1 Background and Introduction

The Sindh Coastal Resilience Project (SCRP) is a hybrid intervention type project where hard as well as soft activities will be implemented in the coastal districts to protect the population from climate induced disasters on one hand and improve their livelihoods, on the other. ADB is financing the infrastructure part aimed at mitigating the impacts of climate change through investments in natural and engineered protection against sea intrusion, drainage of water-logged and flood vulnerable areas and improved availability of freshwater for agriculture and household use. In parallel, IFAD is financing the livelihoods component of the project for smallholders, landless, women and youth through an inclusive and demand driven strategy, approach and interventions.

Sindh is located in the South-eastern region of Pakistan and is the third-largest province of the country by land area and the second-largest province by population. In the Southeast, Sindh has about 250 km long coastline along the Arabian sea with ports and harbours for commercial and fishing activities. The economy of Sindh is the second largest in Pakistan after Punjab. Rural Sindh has an agriculture-based economy and produces fruits, cereals, cotton, sugarcane and vegetables for internal consumption and export to other parts of the country. SCRCP is focused on the three districts that make up the Indus River Delta: Thatta, Sujawal and Badin.

This semi-arid area, characterized by specific ecosystems in this deltaic zone, is highly degraded due to massive water withdrawals upstream along the Indus River (mangrove degradation, salinization). This zone is particularly affected by Climate Change directly (high temperatures, cyclones) and indirectly (floods). The three districts are also affected by poverty. The poor derive 56 percent of their income from agriculture. People lack clear land tenure rights and most of the poor smallholders depend on landowners and middlemen. 84 percent rural households are landless and work as tenants/sharecroppers and daily wage earners. Of the landowners, 84 percent own less than 25 acres. Small holdings, traditional low input-low output production systems, lack of access to technology, services and financial services, and small and scattered marketable surpluses keep performance of smallholder farming below potential. Coastal fishermen communities are the most deprived in terms of productive assets and social infrastructure/services. In Sindh, about 30-35 percent of the population lives below the poverty line. The prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively and exceed the national averages of 20 percent and 40 percent respectively. The SECAP review note provides a more detailed description of this overall situation.

The main purpose of this Environmental, Social and Climate Management Plan (ESCMP) is to clarify the Environmental, Social and Climate risks related to the IFAD-supported project, and set out the action plan to avoid, minimize or mitigate these risks. The ESCMP ensures compliance with SECAP 2021 Policy. The ESCMP Matrix (section 8) provides an overview of the suggested mitigation measures. As villages and value chain plans will be determine at early stage of the project, the Management Plan will have to be adapted and refined as sub-project management plans. Annex 1 provides guidance for the implementation of this management plan at early stage of the project.

2 Project Overview

Project Development Objective and Project Components

The Project development objectives are to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production under climate smart agriculture and fisheries production plans leading to 4P (public-private-producer-partnership) based value chain development that facilitate integration with markets and services; (ii) Increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilitates access to natural resources and support services.

Project Components: SCRCP will have an inclusive approach to transformation of economies and incomes in the target rural communities. The project consists of three complementary components that address the causes of poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.

- (i) Transformation of Coastal Rural Incomes: Rural communities organized and assisted to develop capacities for market oriented improved productivity and production and value addition and transition to higher value outputs/products based on structured value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.
- (ii) Economic and social Inclusion of Disadvantaged Groups (job market and value chain participation facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored enterprise development and technical and vocational service provision).
- (iii) Project Management and Policy Support: Establishment of an efficient project management structure (a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing etc.).

3 Legal Provisions

A number of institutions, policies, legal acts, programmes exist at the national and provincial level for the protection of the environment, mitigation of climate change impacts, youth development, gender empowerment and nutrition. A brief of some of the important institutions and acts relevant to the project implementation and risk management is given below. PMU will have to ensure compliance with this legal framework.

Sindh Environmental Protection Act, 2014. The Act provides for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution, and promotion of sustainable development. In addition, it establishes composition, duties and responsibilities of the **Sindh Environmental Protection Council**, entitled to: coordinate and supervise the enforcement of all the provisions relating to the environment in the Province; approve comprehensive provincial environmental and sustainable development policies and ensure their implementation within the framework of a conservation strategy and sustainable development plan; approve the Sindh Environmental Quality Standards; provide guidelines for the protection and conservation of species, habitats, and biodiversity and for the conservation of renewable and non-renewable resources; integrate principles and concerns of sustainable development into socio-economic and development policies, plans and programmes at the provincial, district and local levels; deal with inter-provincial and federal-provincial issues; provide guidelines for biosafety and for the use of genetically modified organisms; etc.

In addition, it creates the **Sindh Environmental Protection Agency (EPA)** entitled to administer and implement the provisions of this Act and the rules and regulations regarding the environmental issues. The Act specifies that no person shall discharge waste, pollutant, emit noise or any other matter that may cause or likely to cause pollution or adverse environmental effects (as defined in Section 2) in levels higher than specified in Sindh Environmental Quality Standards. No person shall import hazardous waste into Sindh province or its coastal, internal, territorial or historical waters, except prior approval of the Agency. Part VI deals with Environmental Examinations and Assessments and specifies that all provincial authorities, local councils and local authorities responsible for formulating policies, legislation, plans and programmes to be implemented in Sindh province which may cause any environmental impact in the jurisdiction of the province shall forward to the Sindh Environmental Protection Agency a strategic environment assessment.

Sindh Climate Change Policy, 2022. The goal of the policy is to ensure that climate action is mainstreamed in the development planning and especially in the economically and socially vulnerable sectors of the economy; and to steer Sindh province towards green growth and climate compatible development. Some of the important objectives include:

- a. Formulate a province specific policy presenting the full picture of the climate change situation in the province, its affects and provide for a robust set of solutions and implementation plans to mitigate the effects, keeping in view the National Climate Change Policy (October 2021) and the Twelfth Five-Year Plan (2018-23) of the Federal government that combines inclusive growth with green development.
- b. Embed the concepts of Climate Compatible Development and Sustainable Development Goals in the climate change policy in order to improve the understanding of the policy makers and ensure water, food, energy, health & nutrition security for Sindh province in the face of a changing climate.

- c. Ensure interests of vulnerable groups and that gender aspects are adequately addressed in climate development strategies and planning.
- d. Develop a basis to provide for the required human, financial and technological resources and inter and intra coordination mechanisms and frameworks which are required to further the policy objectives and undertake necessary actions, in a clear, timely manner to mitigate the adverse effects of climate change.
- e. Enhance awareness of the impacts of climate change among all stakeholders for necessary appropriate measures to combat and minimize these impacts.

Sindh Poverty Reduction Strategy (2018) is aimed at facilitating local economic development that generates income-generating opportunities for the poor in rural and urban areas, facilitating improved access to physical assets, education, vocational skills training, primary health care, improved nutrition and social services, through improved consolidation and cost effectiveness of service delivery. The Community Driven Local Development approach promoted has been carried out with the support of public organizations such as NRSP (National Rural Support Programme) and SRSO (Sindh Rural Support Organization), customary to support Community Organizations and their networks. Programmes and projects such as the National Poverty Graduation Program and GRASP (Growth for Rural Advancement and Sustainable Progress- in Sindh and Balochistan), must be taken into account.

Sindh Youth Policy 2022. The Province of Sindh had its Youth Policy approved in 2018. The policy aims to empower young people across economic, social, and political spheres. It identifies key challenges faced by youth and proposes effective institutional mechanisms. It lays out a comprehensive action plan spanning short, mid, and long-term strategies, but its targets and resource allocation were only established for the first five years (2018-2023). The primary focus of efforts to enhance the economic empowerment of youth revolved around bolstering education, cultivating new skill sets, offering vocational training and extending support and financing for businesses led by young entrepreneurs.

A **National Gender Policy Framework 2022** has been launched and inputs sought from the provincial governments. Sindh has adopted a **Gender Equality and Women's Empowerment (GEWE) Policy (2020-2030)**. The vision of this policy is that women and girls are equal citizens and participants in decision-making from the home to the national and international levels, are able to lead a life free from violence, discrimination, exploitation, neglect and abuse, and enjoy the full range of their social, political and economic rights. While the main objectives are safeguarding gender equality and the rights of women and girls, mainstreaming gender and investing in projects for removing barriers to gender equality and women's empowerment.

Sindh Commission on Status of Women, Strategic Plan 2022-24 has been implemented with a vision where women enjoy gender equality, live with dignity, are empowered, and protected, and contribute as equal citizens to development in an environment free from all forms of violence and discrimination. Important objectives set for the Commission are to examine policies for women's development and gender equality and to review laws, rules and regulations affecting the status of women.

Furthermore, a project funded by JICA, supporting women economic empowerment has been recently completed in Sindh: (Livelihoods and Well-being of Female Home Based Workers in the Informal Economic Sector in Sindh Province - LIGHT-F Project). Implemented with the Women Development Department of GoS, it has developed a set of tools to enable women to acquire professional behaviors and to use more financial services. Some of those tools, developed for rural context, could be considered under component 2 of the SCRP.

A **Multi-sectoral Nutrition Strategy** has been adopted for 2018-2025. Through the BISP, WFP provides nutrition and health support to pregnant women and mothers of young babies in Sindh. This programme must be considered to take advantage of nutrition awareness provided to mothers and move forward for actions leading to better food security for households.

Sindh Drinking Water Policy 2017. The goal of the policy is to improve the quality of life of people of Sindh by reducing morbidity and mortality caused by water-borne diseases through provision of safely managed and potable drinking water to the entire population that is located on premises, available when needed, and free from contamination, affordable and of sufficient quantity, and in a way that is efficient, equitable and sustainable. Major objective is to create an enabling framework for safely managed drinking water supply, regulation of water usage, extraction, treatment, transportation and distribution.

Sindh adopted an **Agricultural Policy for 2018-2030**. The Policy also seeks to reduce rural poverty along with food insecurity and malnutrition. Efforts will be made to increase the agricultural sector growth to 4-5% per annum, which is a necessary condition to raising incomes and reducing poverty and food insecurity; providing decent employment, particularly to the large numbers of youth entering the labour market. Higher overall growth and increased productivity will be the main engines for reducing poverty and malnutrition in rural areas. One of the major objectives of the Policy is: Make efficient and sustainable use of natural resources and minimize negative environmental impacts, and make all efforts to preserve the agro-ecological resource base.

The key natural resources for agriculture in Sindh are its soil and water and to conserve these, Government will promote better on-farm water management; regulate and control groundwater resources, coastal areas, and rangelands; enhance effective controls on pollutants, including fertilizer, pesticides and effluents; and promote agro forestry and improvement of grazing areas. SCRP fully meets these objectives. In addition, Climate change impacts affect agriculture and actions to adopt more resilient practices are needed. The Irrigation Department is also involved in flood control, protection, and drainage.

The **Nationally Determined Contributions (NDC)** have been updated in 2021. Among various principles, GoP highlights the potential of Nature Based Solutions for climate mitigation, climate adaptation and livelihood opportunities. GoP intends also to improve cross-referencing to climate change in national and provincial policies and action plans on climate adaptation and mitigation. In agriculture, smart inputs and management practices in agriculture and livestock management are promoted (improved irrigation practices and water management; climate resilient agriculture/ agroforestry practices; introduction of climate resilient seed varieties; promotion, storage and management of green manure). In addition, in particular for Sindh, the blue carbon ecosystems are seen as untapped carbon sink amid other Nature Based Solutions. This blue carbon is mainly composed of mangroves, tidal marshes and seagrass beds that characterize the project area.

The Federal Cabinet approved a **National Adaptation Plan (NAP)** in July 2023 to fashion an effective response to increasing frequency of climate change induced disasters. NAP is a framework for implementing large-scale environmental adaptation, building climate resilience, promoting inclusivity, facilitating collaboration among different stakeholders, and serving as an effective tool for climate finance mobilization. The plan outlines ten priority areas including addressing increasing water scarcity, protecting natural endowments, urban resilience, human capital development and disaster risk management.

The **Sindh Wildlife and Protected Areas Act 2010**. The Act provides legal cover to the policies of the government to meet the local, provincial, national and global requirements for protection, preservation, conservation, management and sustainable use of biodiversity, especially wildlife and their habitats in the Province as a key component of biological diversity with due recognition to social, cultural, economic, biological and ecological significance for the present and future generations, and to provide for and to support participation of local communities by creating enabling environment, raising awareness, building capacities and providing economic incentives for promotion of their social, economic, cultural and ecological well-being including poverty reduction. However, the natural ecosystems of Sindh are severely affected by the lack of freshwater in the Indus River, the various pollution from industries and agriculture (pesticide, overgrazing), logging for wood fuel, raising important negative impacts on wildlife.

4 Brief Environment, Climate and Social baseline information in the project locations

A. 4.1 Climate Trend and Baseline

The province of Sindh is situated in a subtropical region; it is hot in the summer and cold in winter. Temperatures frequently rise above 46 °C (115 °F) between May and August, and the minimum average temperature of 2 °C (36 °F) occurs during December and January. The south westerly monsoon wind begins to blow in mid-February and continues until the end of September, whereas the cool northerly wind blows during the winter months from October to January. Sindh lies between the two monsoons — the southwest monsoon from the Indian Ocean and the northeast or retreating monsoon, deflected towards it by the Himalayan mountains — and escapes the influence of both. The region's scarcity of rainfall (average annual precipitation between 180 mm and 300 mm in Sindh) is compensated by the inundation of the Indus twice a year, caused by the spring and summer melting of Himalayan snow and by rainfall in the monsoon season. These natural patterns have recently changed somewhat with the construction of dams and barrages on the Indus River. Erratic rainfall patterns are mentioned: parts of

southeastern Sindh received rainfall of up to 36 in (91 cm). In 2005, Hyderabad received 14.4 in (37 cm) in just 11 hours.

According to the Intergovernmental Panel on Climate Change (IPCC), there has been 0.6 to 1.0°C rise in average temperatures since the early 1900s in the coastal areas of Pakistan. 10 to 15% decrease in precipitation in the coastal belt and hyper arid plains over the last 40 years has been observed. It has been predicted that the Western Himalayan glaciers may retreat during the next 50 years, resulting in a decrease in downstream river flows by 30% to 40% over the subsequent fifty years.

An analysis of the changes in minimum and maximum temperature and rainfall in Sindh coastal area has shown that yearly mean maximum temperature fluctuated between 32.3 to 35.1°C, while that of minimum mean temperature ranged between 18.8 to 20.8°C which revealed that mean minimum temperature was towards the higher side. The average rainfall has also reduced and the overall impact on surface water bodies and vegetation has been adverse from 1972 to 2010. Vegetation species diversity has been reduced considerably and currently the vegetation is dominated by salt tolerant shrubs like the family of Chenopodiaceae and Tamericeae.

The annual precipitation of Pakistan has increased significantly by 61 mm from 1901 to 2007. The World Bank and ADB (2021) has warned of changes to Pakistan's rainfall and runoff regimes, and hence its water resources, were highly uncertain; an increase in the incidence of drought conditions was likely. Mean rainfall in the arid plains of Pakistan and the coastal belt has decreased by 10%–15% since 1960, contributing to the ongoing degradation of the country's wetlands and mangrove ecosystems. Most other regions have experienced a slight increase, seen both in the monsoon and dry seasons. The number of heavy rainfall events has increased since 1960, and the nine heaviest rains recorded in 24 hours were recorded in 2010.

Only considering the precipitation data of Sindh over the decades, the vulnerability of the province to floods cannot be depicted²⁶. Floods were relatively uncommon in the province. The problems of floods in Sindh are mostly connected to the downstream flow of water through the Indus River. Therefore, the focus should be directed towards the local conditions as well as the changing precipitation patterns of the Upper Indus Basin. The heavy downpour of KP inundating the Indus Delta in 2010 and 2011 and local rainfall resulted in heavy flooding in Sindh.

A recent study has analyzed 57 years (1961-2017) time series climate data of Thatta, Sujawal and Badin districts and has shown rising trends in temperature. This study has concluded that the margin between the mean annual maximum and minimum temperature continues to get narrower. The 48 years (1961 to 2008) data analysis has also shown that precipitation seemed to be declining across these districts. Relative humidity and wind speed have decreased in Thatta and Sujawal while both have increased in Badin during 48 years.

Climate change and variability will have significant impacts on food security and malnutrition. They will lead to more intense and longer droughts and the frequency of heavy precipitation events has increased over most land areas. Droughts and water scarcity diminish dietary diversity and reduce overall food consumption, and this may lead to malnutrition. The risk of flooding may increase, from both sea-level rise and increased heavy precipitation in coastal areas. This is likely to result in an increase in the number of people exposed to diarrheal and other infectious diseases, thus lowering their capacity to utilize food effectively.

Recent history of district Badin shows that it has remained in the grip of disasters in one form or another. Cyclone, heavy rains, droughts and floods have followed each other with short intervals. The frequency of floods from upstream, local heavy rains and droughts is higher than other hazards. With the decreased flow of freshwater in Indus river, the sea is encroaching Indus's delta and the courses Indus has left in Thatta. The sea intrusion is also severely affecting the aquifers at many places in the district where groundwater and lands have become saline. Villages and union councils along the coast are having a history of being hit by cyclones. Being a dry region, Thatta always faces the risk of droughts. The Kohistan and desert zone of the district are especially vulnerable to this hazard as they face extreme shortage of potable water.

B. 4.2 Physiography

The **deltaic plains of Sindh** lie in the Lower Indus valley. This very flat zone, known to be fertile, consists of alluvium, trenched with river channels in some places and overridden by raised terraces in others. It is the end of the

transboundary Indus River Basin plain that covers 65% of Pakistan (FAO Aquastat). Due to its unique topography and hydrology, the basin and its delta are prone to severe flooding during the monsoon season.

Located in the Indus delta, the three districts of Thatta, Sujawal and Badin are characterized by both the aridity of its climate (average annual precipitation between 180 mm and 300 mm in Sindh) and the presence of water (Sea, and the Indus River fed by the monsoon season and melting of Himalayan snow upstream). This coastal plain is known for hosting one of the largest mangrove forests of the world and a rich biodiversity of birds and fish. However, the three districts have been progressively facing significant degradation of their ecosystems for the past 60 years.

Mangroves are spread over 0.84 m ac (0.344 million ha) and are protected under the 1927 Forest Act by the Government of Pakistan. The 342 km long and 50 km wide coastal belt along the Arabian Sea is a complex and distinct environment, pre-dominated by the Mangrove ecosystem. Badin, Sujawal, Thatta and Karachi districts coast is covered by 180,310 ac (73,000 ha) of Mangroves of the Indus which are ranked as the 6th largest contiguous freshwater mangroves worldwide. Mangroves form a unique assemblage of flora and fauna, providing a complex detritus-based food web for a number of marine and brackish water organisms. They serve as breeding grounds for fish and shrimp, protect Karachi and Bin Qasim ports from silting, and the city of Karachi from tsunamis. The main tree species growing in these forests is *Avicennia marina* which is locally known as timer and forms 97% of the total Mangrove tree cover. Other species are *Rhizophora macronata*, *Ceriops tagal*, and *Aegiceras cornicuata*.

Forests. Total forest cover in the province is 2,553,980 ac (1,034,000 ha) where four different types of forests are found. (a) Riverine forests occur along the protective embankments on both sides of River Indus. These forests rely on inundation by River Indus for irrigation and, therefore, their existence is heavily dependent on the intensity, duration, and frequency of river water flow. Riverine forests are the mainstay of forestry in Sindh. Besides providing a source of livelihood for thousands of people, these forests provide fuel wood, timber, fodder, honey, and tannin. Moreover, they serve as carbon sinks and also protect the surrounding areas from the severity of floods. (b) Irrigated forests are canal irrigated plantations and are also known as Inland forests. These are covering over 203,306 ac (82,310 ha). Eucalyptus is the most common tree species of irrigated forests. Other common trees are semul, mulberry, java plum and lead tree (used as fodder).

Biodiversity and protected areas. Wildlife surveys were undertaken in the prime wildlife habitats of Sindh during 2010 – 2018 and a total of 82 species of mammals, 420 species of birds, 103 species of reptiles, 7 species of amphibians and 33 important plant species were recorded from these areas. The key species include: Sind Wild Goat, Urial, Chinkara deer, Leopard, Bluebull, Hog Deer, Hyena, Caracal, Honey Badger, Fishing Cat, Desert Fox, Indus Dolphin, Humpback Dolphin, Indian Peafowl, Sarus Crane, Houbara Bustard, Marbled Teal, Grey Partridge, Chakur, Indian Whitebacked Vulture, Indian Longbilled Vulture, Shaheen Falcon, Marsh Crocodile, Green Turtle, Olive Ridley Turtle, Indian Python, Desert Monitor, Fat tailed Gecko, Spiny tailed Lizard and Freshwater Turtles. This unique and rich wildlife, due to the presence of various ecosystems and diverse range of landscapes including deserts, wetlands, riverine and mangrove forests, agriculture and coastal areas, has been protected in a network of protected areas spread over different ecosystems. Sindh counts 50 Protected Areas (One National Park, 33 Wildlife Sanctuaries and 16 Game Reserves), 10 Ramsar Sites, 19 IBAs and three Eco-regions representing the major ecosystems of the province.

However, these ecosystems are heavily affected by the massive water withdrawals upstream along the Indus River for agriculture. Due to intense uses all along its watershed (dams, reservoirs, and irrigation), the current flow observed in the Delta are most of the time far below 10 MAF (Million Acre Feet) and the 27 MAF recommended by IUCN. As a result, the Delta of Indus does not receive enough freshwater, leading to seawater intrusion into surface and groundwater resources, accelerating coastal erosion and reducing sediment deposits, impacting the mangrove also affected by overgrazing. In addition, in the semiarid context of Sindh, inappropriate irrigation management accelerate soil salinization. And finally, damages of natural waterways and drainage canals in the region, generate regular water logging. This deterioration in ecosystems is mainly observed in the southern part of the project area.

C. 4.3 Socio-economic baseline

With 153,018 households, Sujawal district population is about 0.78 million as per the 2017 census. 89.0% of Sujawal's population resides in rural areas and 11.0% in urban areas. Male population is 406,754 and females are 375,193. Thatta's population is about 0.98 million which consists of 184,868 households according to the Census of 2017. 82% of the population lives in rural areas and the remaining 18% in urban areas. Out of them, 510,279 are males (52%) and 469,504 are females. Badin has the highest population of about 1.8 million with 359,376 households. Male population is 932,488 (52%) while females are 871,979, out of which 78% live in rural areas. The socio-economic situation of each of the three districts is quite similar. The population area is predominantly rural (78 to 89 percent) and the majority lives in poverty (82 to 86 percent of the population is multidimensionally poor). Thatta has the highest score of multidimensional poverty index (0.6) in Sindh followed by Badin and Sujawal (0.5 each). A study on asset-based poverty index showed that tehsils of Badin district such as tehsil Golarachi (0.78), Tandobago (0.76), and tehsil Malti (0.75) are the poorest whereas Thatta also showed high asset-based poverty³⁵. Badin is considered with high incidence of poverty where 40 percent of population live below poverty line³⁶. A significant 69.0% of household members in District Thatta are in severe poverty³⁷.

The target districts are mostly agrarian with major occupations of farming, fishing and rearing livestock. There are two crop seasons, Rabi (winter) and Kharif (Summer) with major crops of rice, sugarcane, cotton and vegetables. In Badin, about 69 percent of the area is irrigated and cropped, 13 percent area is saline and about 7 percent area is wet. While Thatta (including Sujawal) shows a totally different picture where only 20 percent area is irrigated and about 40 percent area is wet. There are six sugar mills and 30 rice husking mills in the district but remains one of the poorest districts of Sindh. Irrigation (presence of Indus), fishery (presence of the seacoast), Livestock and industries (closer to Karachi) are more developed in Thatta and Sujawal than in Badin.

5 Environment, Climate and Social impacts and mitigation measures

D. 5.1 Brief overview of project activities

In addition to the ADB supported components related to ecosystem restoration (green infrastructure aiming at restoring mangrove and in-land forest, and grey infrastructure seeking to rehabilitate surface drainage system and water flow), the IFAD-supported SCRP has three components supporting livelihoods:

Component-1 involves transformation of coastal rural incomes by organizing target villages for the development and implementation of village development plans for different income groups. Village Development Organizations (VOs) will identify and prioritize community infrastructure investments while interest groups plans will be the basis for identification of value chain related investments/infrastructure. Each VO will be eligible, on average, for a grant of US\$ 50,000, to address (a) priority infrastructure needs (drinking water, sanitation, irrigation, all weather road links, household solar systems etc.); (b) equipment and infrastructure for product processing, aggregation, value addition Infrastructure investments will be for schemes benefitting the entire village while value addition/processing investments will be focused on interest groups.

Component-2 for social and economic inclusion of disadvantaged groups will involve provision of income generating production assets to landless and assetless households. Nature of the asset will be such that it quickly adds to the income of the family as per prevailing opportunities in the area like handheld reaper or mechanical tiller or a sheller or a processing, value addition or haulage equipment. This component will also benefit young men and women from poor households through provision of vocational, technical and enterprise skills. These young men and women will be selected from households other than those who received productive assets.

Component-3 is on policy management, promotes sustainable innovation and ensure project management and support.

Proposed investment per village is limited to USD 50,000 to be spent on prioritized construction related activities including drinking water facilities, sanitation, small community level irrigation schemes and roads during the

35 <https://fbi.springeropen.com/articles/10.1186/s43093-022-00162-4>

36 Clustered deprivation: District Profile of Poverty in Pakistan. SDPI 2012.

37 Sindh District Profiles 2021, Planning and Development Department, Government of Sindh.

project life. The scale and magnitude will be quite limited and will not warrant any important pollution, labor or biodiversity related risk. Similarly, the project does not involve any land acquisition while the concerned community or VO will voluntarily provide any piece of land for any of the above activities during implementation. Site selection of the proposed intervention will be based on community's consultation to avoid any risks while design will be climate resilient from the expected disasters. Because of the nature and size of activities, local people will be engaged as laborers to earn for themselves and there will be no need for laborers from outside the project area. The project interventions do not involve any resettlement, there is neither cultural heritage, nor indigenous peoples in the project area.

E. 5.2 Risk classification

The project is categorized as 'moderate' for the environmental and social risks.

Protected areas of the three districts are well documented (see the map developed by FAO in 20217 for the Protected areas in Sindh - <https://www.fao.org/3/cc4323en/cc4323en.pdf>). No project activities will take place in or near these areas, and no potential direct nor indirect impacts have been identified.

In addition to the ADB supported components of SCRPs aim at restoring ecosystem services with green and grey infrastructures (forest restoration and drainage system).

Construction of small ponds (less than ½ acre) are planned under the project for water storage and aquaculture purposes. Ecosystems in these areas are already highly degraded, however, prior assessment and clear specification will guide the work of suppliers to prevent additional damage.

Support to farmer and fisherfolk communities will promote sustainable and climate resilient practices. Not environmentally sustainable production of living natural resources is not expected. Support to livestock and aquaculture will remain size-limited (3 to 5 small ruminants for family, aquaculture ponds or coastal sea farms of less than ½ acres). Manure and wastewater will be recovered for agricultural use.

Use of chemicals (fertilizers and pesticides) will be reduced and sustainably managed with (i) a participatory assessment of practices, (ii) training on compost, biocontrol, crop rotation, biopesticide, and other climate-smart practices encouraging farmers to reduce their dependency on input suppliers and use chemical only when needed.

In the three districts of the project, the only cultural heritage listed is the Historical Monuments at Makli concentrated around Thatta city (necropolis from the 14th to 18th century). No project activity will be carried out in this sub-urban area, therefore no direct nor indirect impact has been identified.

As in all rural areas, children regularly contribute to the work of the family farm. Information raising aimed at parents will be provided to remind the central role and priority of scholarship. Project suppliers are not expected to employ young people under the age of 18.

As in all rural areas, farmers of Sindh may be exposed to extreme weather and other OHS risks inherent to activities in the agriculture sector. Farmers and fisherfolks will be trained and made aware of these risks and how to mitigate them.

Influx of traffic is anticipated as minor and limited to the activities in relation to secondary road rehabilitation in isolated coastal communities. Adequate mitigation measures, including reinforced signaling to enhance safety will be assessed and implemented in these cases.

When the project can contribute to improved land agreement between landowners and sharecroppers/tenants, PMU will provide assistance to develop clear and appropriate agreement benefiting from the lessons learned of the FAO project "Improved Land Tenancy in Sindh Province" (<https://www.fao.org/documents/card/en?details=cc2179en>). Local committees will be put in place to manage eventual grievances/disagreements between landowners and sharecroppers/tenants (see the Grievance Redress Mechanism).

Women will represent at least 40% of the project's target population, and Component 2 targets specifically women in addition to youth. Thus, measures to prevent an increase in gender tensions will be embedded in the project activities.

The Project will support access to formal credit services for beneficiaries' production/income generation activities under two streams. Stream 1 to support provision of interest free subsidized loans to project beneficiaries, and Stream 2 through a partial credit guarantee instrument to cover the credit risk of the partner banks. This will be provided to lending financial institutions on a reducing basis over the Project period. Financial intermediaries will be selected during early implementation under a competitive process and specifications will include criteria related to the existence of a robust Environmental and Social Management System in line with SECAP requirements.

SCRCP is classified as 'substantial' for the climate risks.

Hazard identification: Project areas covered by SCRCP activities are experiencing flooding, cyclones, sea intrusion, droughts (less pronounced but the climate is already semi-arid in Sindh) and heat waves. The risk, vulnerability, intensity of these hazards on the concerned communities and ecosystems should be assessed with proper mitigation measures at the implementation stage.

Exposure Assessments: Poor and vulnerable rural populations will access program interventions in agricultural systems, livelihoods, and infrastructure. Given that crop production and fisheries are dependent on weather patterns and climatic events and the relatively low adaptive capacities of target populations, the climate risk is deemed substantial.

Sensitivity: Income earned from agricultural, livestock and fishing activities form the core livelihoods of the target groups covered by the project. Again, because revenues earned from crop production and other agricultural activities highly correlate with weather patterns and climatic events, beneficiaries covered by the project are climate sensitive. While the project expects to build the resilience of target populations to withstand the adversities of climate and other economic shocks, at baseline, low adaptive capacities characterize these populations.

Smallholder farmers and target groups display a moderate awareness of climate risks and related adaptive and mitigation measures. Project efforts to build the adaptive capacities of its beneficiaries must emphasize the need for disaster risk planning, climate resilient cropping, and reduced post-harvest losses, among other interventions that build the beneficiary's capacity to cope with, or recover from, the effects of climatic shock events.

Project outcomes may be adversely impacted by climate change and without the provision of effective adaptation measures, beneficiaries may face financial challenges, while the ecosystem and biodiversity may face degradation. Effective risk management and building adaptive capacities of households, infrastructure, communities, and ecosystems are imperative for the success of the project.

F. 5.3 ESC Impacts & Mitigation measures

1. 5.3.1 Biodiversity

Biodiversity and the environment in the three districts are severely affected by the agricultural sector, in particular due to major water withdrawals upstream from the Indus River Delta.

The ADB-linked project will contribute to restore ecosystem services and improve the water cycle to strengthen climate resilience of local communities. To the possible extent, UC and Village selection will be aligned with ADB supported infrastructure and needs for such infrastructure identified in the VO umbrella plans will be shared with ADB's Management Unit for consideration and inclusion under ADB financing. The best use of the forthcoming ABD supported green and grey infrastructures will be sought to boost sustainable productivity, improve climate resilience of local communities and provide job and market opportunities.

SCRP will not implement any activities within protected areas as well as off protected coastal zones. PMU will regularly update the official list of protected areas provided by the Environment Protection Agency (SEPA). When project activities will be implemented near protected areas (official buffer zone), PMU will conduct assessments of direct/indirect impacts in line with existing management plans and ensure local stakeholder engagement (SEP) and relevant authorities mobilization suggested by SEPA. For activities with implications for biodiversity that cannot be avoided, identify mitigation measures in line with the Provincial Guidelines as per the Provincial Protection Act of 2014 and the requirements of Standard 1 of SECAP.

Assessments of direct and indirect impacts to biodiversity, ecosystems and services will be carried out in-house (with the Environment and Climate specialist of the PMU) in particular for activities under component 1 (interest group development plan and infrastructure). Given the foreseen limited size of planned infrastructure, Impact Assessment shouldn't be expected, but relevant provisions for contractors of infrastructures will be provided (via specification of tenders).

Given their key role under component 1, skills related to environment and ecosystem management of Implementing Partners will be analyzed by PMU at recruiting stage. Every year, IPs will be invited to assess their own work performance and impact.

IPs will be in charge, with possible service providers (including public services for agricultural extension and/or environment), to train Villages Organizations on ecosystem services, ecosystem maintenance and how agriculture can benefit from ecosystem and impact ecosystems, in particular where the ADB-supported infrastructure will be implemented. This will be done under the Umbrella Village Plan (UVP) of component 1.

Under the Business plan 4P development proposals of Component 1, farmers and fisherfolks will be assisted to adopt climate resilient and eco-friendly practices. Irrigation schemes will remain limited in size (less than 300 ha). The Sindh Irrigation Department will be involved to ensure sustainable investment and appropriate water management system. SCRPs implementation will include construction of ponds, limited in size (less than ½ acres) for water storage and aquaculture, in areas where ecosystems are already affected by the disruption of flows in the Indus River (sterile soils due to salinity, disappeared coastal lakes and wetland). Integrated water resources management principle will be observed by PMU, associated with water saving analyses. Suppliers of ponds will have to respect clear specifications to prevent damage to ecosystems.

Under component 2, supported training, jobs and income generating activities, a particular attention is paid to avoiding damage to the ecosystem (particularly in the provision of livestock to avoid overgrazing or waste-generating activities) and, on the contrary, to promoting environmentally friendly jobs/income generating activities (Green Jobs).

Under component 1, 2 and 3, innovation to adapt to saline environment will be promoted when feasible.

2. 5.3.2 Resource Efficiency and Pollution Prevention

The planned infrastructures under sub-component 1.2 will be procured under appropriate certification and verification system in particular for the construction of secondary roads and landing-site.

Integrated water management will be adopted for aquaculture, irrigation and drinking water supply. When harvested, water will be stored during the flooding season and using wastewater for agriculture after treatment. All sources of water leakage will be controlled; laser leveling will be encouraged targeting farmers and landowners.

To prevent impacts on ecosystems, livestock provision, ponds for water storage, coastal ponds for aquaculture, as well as shellfish farms, net pens, and cages for offshore aquaculture, must initially be presented to the Sindh Environmental Protection Agency (SEPA) to determine the necessity for prior Environmental Impact Assessments (EIA) and Initial Environmental Examinations (IEE).

In the framework of SCRPs, farmers, fisherfolk and landless communities will be encouraged to adopt climate-friendly and eco-friendly practices, in particular based on the Targeted Adaptation Assessment.

Under the Value Chain Business Plans (Component 1), the project will support farmers/fisherfolks in adopting sustainable practices, promoting climate smart agriculture, ecofriendly fishery and aquaculture. Soil fertility and pest control will be systematically considered (see Annex 2. Integrated Pest Management and Soil Fertility strategy in SCRIP), current situation will be analyzed with farmers (skills to identify plant pest, quality and quantity of pesticides used, equipment for application, efficiency of treatment), before providing adapted recommendations and advice, and strengthening capacities with sustainable practices from Climate-smart agriculture (such as biopesticides, biocontrol and crop rotation). Under such approach, chemicals will be used at the last resort with appropriate products and dosage. Where the VC plan leads to the use of agrochemicals (as a last resort), and technical support for pest control is formalized in a pest and fertilizer management plan (please refer to Annex 2). Similar approach will be used to address soil fertility, leading to consider alternative practices such as crop rotation compost production and application, intercropping, application of biochar, use of manure, growing legumes, developing agroecology, ...

Information will be given to farmers to avoid soil salinization and waterlogging with inappropriate irrigation practices. Use of agrometeorological service will be encouraged.

To deliver these technical supports, IPs may solicit extension service of the Department of Agriculture; Badin service will be considered for potential training of trainers, because of the recent support in climate-smart agriculture provided by FAO under the project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management – TIBCRAWM".

Landowners should be also informed of the benefices of such practices so that land agreement can be streamlined and encourage farmers to adopt these practices (having access to the same land for a longer period of time). Local agro-dealers will be contacted and trained so that they can inform farmers with adequate recommendations.

Production of compost, manure collection and application, production of biopesticides, can lead to job opportunities under Component 2.

Training to fisherfolks communities will complete support in terms infrastructure, to encourage sustainable practices (fishery management plans, fish grading, use of improved fishing gear technology. Landing sites will be equipped with oil disposal tanks managed by fisher communities). Promotion of improved stoves / solar stoves for fish smoking/drying will be encouraged and supported under sub-component 1.1 and 1.2.

Aquaculture development will be backed up by appropriate training (including period of internship on existing site) so that fisherfolks can become professional fish farmers with appropriate skill on water quality control and feed management.

Aquaculture ponds will be filled during flooding season and/or using brackish water with adapted species. Wastewater from aquaculture will be used for agricultural purpose. When possible, with experimented group, agriculture/aquaculture combined system will be tested and scaled-up.

Under the VC plan for marine aquaculture, environmentally friendly solutions will be promoted wherever possible such as Recirculating Aquaculture Systems (RAS), which utilize closed-loop systems to treat and reuse water, minimize environmental impact and allow for improved control over growing conditions; and Integrated Multi-Trophic Aquaculture (IMTA), which combining the farming of different species that have complementary roles in the ecosystem to improve sustainability and reduce waste.

Production of fodder in tidal areas will be tested and developed under Component 2 to limit overgrazing. Fodder storage capacities will be supported accordingly.

3. 5.3.3 Labor and Working Conditions

As most of the rural area worldwide, child labour may exist in Sindh agricultural sector. Under the Village mobilization of component 1, parents will be sensitized to avoid child labour and prioritize first child scholarship and education. When working on the family farm outside school hours, children shouldn't be exposed to hazardous tasks (such as aquaculture, pest management) and their mobilization should be geared towards the acquisition of skills.

The working conditions of farmers and their families are difficult in Sindh and may be exposed to OHS. Farmers are regularly exposed to extreme temperatures in this semiarid territory, as well as pesticides. The project is anticipated to mitigate these risks on workers, providing recommendations for good agricultural practices. Use of Personal Protected Equipment will be encouraged, as well as livestock prophylaxis and Veterinary services (C2). When constructed, ponds will be protected to prevent drowning.

If situations are reported, landowners will immediately be informed of the illegality of abusive requests made to sharecroppers. The tenant farmers concerned can receive support in taking legal action.

4. 5.3.4 Community Health, Safety and Security

Throughout project implementation, specific measures to prevent and address risks related to gender-based violence (GBV) will be adopted. At a minimum, these should include the establishment of “confidential channels for reporting incidents and providing support” as well as appropriate grievance redress mechanisms. With established reporting protocols in place, any incidents of GBV occurring in the context of the project can be immediately addressed through confidential reporting and documentation. Other measures potential measures include:

1. Ensuring gender balance among project staff, especially those involved in service delivery.
2. Adapting facilities set-up and services delivery to ensure they are accessible, safe, and convenient for women and girls, taking into consideration their age, disability status, and residency status.
3. Conducting regular consultations with women and girls, paying attention to groups who may be particularly vulnerable. This may require organizing women-only groups of focus group discussions, with female facilitators or staff, to ensure women have the possibility to flag their concerns and interests as freely as possible.
4. Creating an enabling environment for women’s participation through the social mobilization process and appropriate and purposeful communication (for example, targeting religious and traditional leaders and influential community members to ensure there is buy-in on women’s participation in the project’s activities and potential risks of tension and conflict within households and communities are mitigated.
5. Mapping the existence of adequate services for survivors/affected persons.

Furthermore, the PMU will ensure that contractors and suppliers include clear provisions regarding non-discrimination and prevention of sexual harassment and sexual abuse.

When appropriate, PMU will ensure that contractors establish traffic management system during construction of secondary road (Sub-component 1.2).

5. 5.3.5 Resettlement

When the project can contribute to improved land agreement between landowners and sharecroppers/tenants, PMU will provide assistance to develop clear and appropriate agreement benefiting from the lessons learn of the FAO project "Improved Land Tenancy in Sindh Province" (<https://www.fao.org/documents/card/en?details=cc2179en>). Local committees will be put in place to prevent grievance between landowners and sharecroppers/tenants (see the Grievance Redress Mechanism).

6. 5.3.6 Financial intermediaries

Risks related to the mobilization of financial Institutions for microcredit are limited as financial institutions in Pakistan are familiar with Environmental and Social Management Systems. Furthermore, the financial institution will be selected through a competitive process including clear specification related to Environment and Social management Systems.

6 Institutional arrangements and Monitoring

To ensure the project meets the needs of local communities and builds on their strengths, consultation and participation of local stakeholders are necessary in project preparation, implementation, monitoring and reporting. Stakeholder engagement shall be free of intimidation or coercion, gender and youth inclusive and responsive, tailored to the needs of disadvantaged and vulnerable groups. Timely disclosure of relevant and adequate information, preferably in Sindhi, will be provided to stakeholders and made readily accessible. Documentation of stakeholder engagement processes will form part of project report submissions. Action plans (ESCMP, Stakeholder Engagement Plan) have been prepared, to incorporate stakeholder feedback, including a Grievance Redress Mechanism. The documents will be included as materials for periodic monitoring. A website dedicated to project implementation will be made and all information and action plans shall similarly be uploaded to the project website. If despite an official project GRM, stakeholders still need their concerns to be resolved in a fair and timely manner through an independent process, IFAD may be contacted by e-mail at SECAPcomplaints@ifad.org.

PMU will include an Environmental and Climate Change Specialist who will be in charge of implementing and monitoring the Environmental, Climate and Social Management Plan under the project. The Specialist will check and assess every relevant activity in the business plan and prepare a report recommending or rejecting the proposed intervention with proper justification and reasoning. Regular monitoring of activities with physical visits and feedback from district offices should be carried out with proper record and report to be summarized in the project progress reports including compliance status, challenges and issues.

SCRIP will also have district level units in each of the three selected districts to manage the related activities. However, implementing partners will be assisting and facilitating the implementation of mitigation and adaptation measures directly or indirectly through expert consultants.

Monitoring of SECAP performance assessment will be conducted by PMU on a semi-annual basis. Results of monitoring shall be disclosed to stakeholders and their feedback recorded and acted upon.

Materials to be prepared and assessed are:

- Records of community participation during project planning and implementation phases, including issues raised by target groups, how addressed, use of local languages where appropriate.
- Proof of environmental permit compliance on relevant activities.
- Reports on environmental and social management and monitoring activities.
- Reports on the monitoring and evaluation of private sector participation.
- Records of grievances received and the management process to completion, along with analysis of the grievance trends.
- Occurrence of climate extremes and associated disaster/risk measures.
- Disaggregated records on the participation of women and young people in all activities (ie. training/capacity building, consultations, and others).

7 Capacity Building

In general, climate change related awareness is there especially in the Agriculture and Fisheries Departments while awareness and experience about the adaptation and mitigation measures is limited. The ongoing GCF/FAO project (TIBCRAW) is implementing climate smart agriculture interventions in Badin district and has transferred knowledge and expertise to the concerned government department staff through classroom training and field implementation. This staff could be considered as potential training of trainers for other extension services. Farmers groups may be more advance in climate smart agriculture in Badin as well than in the other two districts. Thus, appropriate peer to peer exchange could be organized accordingly. Overall, the following capacity building activities are needed to be organized for the implementing agencies and partners, target and interest groups.

Within the framework of the CPRS, the training provided to village organisations, interest groups and individuals must first take into account existing knowledge and practices, as well as the bottlenecks that hinder change.

8 ESCMP Matrix

The ESCMP Matrix provides details of the concerned impacts and their mitigation measures. Consultation regarding different impacts and their mitigation measures among the involved stakeholders will be key to the

effective implementation. Overall, PMU and Social Mobilization Partners (SMP) will be responsible for the implementation of ESCMP while concerned government departments like Agriculture, Fisheries and Coastal Development will be supporting the project in the target districts. VOs and other interest groups will also play their roles in their respective and relevant activities. All the activities will be regularly monitored through activity and periodic progress reports.

ESCMP Matrix

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
1. Biodiversity						
Threat to or loss of biodiversity, natural resources, ecosystems and ecosystem services	<p>1.1 Ensure complementarity with the ADB-supported component of SCRCP aiming at restoring ecosystem services and strengthening climate-resilience of local communities.</p> <p>1.2 Update the list of protected areas in the three districts of the project.</p> <p>1.3 Avoid all project activities in protected areas.</p> <p>1.4 For activities near protected areas (buffer zone), conduct an assessment of direct/indirect impacts on the protected areas, in line with existing management plans and ensure adequate stakeholder engagement with relevant authorities/management bodies.</p> <p>1.5 Conduct assessments of direct and indirect impacts to biodiversity, ecosystems and services where the project will be implemented (Villages level) to identify the need for mitigation measures, applying the precautionary principle and following the mitigation hierarchy.</p> <p>1.6 For activities with implications for biodiversity that cannot be avoided, identify mitigation measures in line with the Provincial Guidelines as per the Provincial Protection Act of 2014 and the requirements of Standard 1 of SECAP.</p>	<ul style="list-style-type: none"> • Sindh Environment Protection Agency (SEPA) • Meetings with Village Organizations, rural support organizations and sub-groups for all three Districts in the context of the Stakeholder Engagement Plan (SEP) activities. 	PMU	<ul style="list-style-type: none"> • Sub-project screenings and assessments • Semi-annual Monitoring Reports • Land use map and GIS activities screening 	Annual	In-house

	<p>1.7 Consult with local stakeholders on the outcomes of the assessments in the context of the activities of the SEP (stakeholder Engagement Plan).</p> <p>1.8 Ensure inclusion of relevant provisions for contractors of infrastructures based on the results of the assessments (1.4 and 1.5).</p>					
	<p>1.9 Control the environmental and ecosystems skill of Implementation Partners (specification in the tenders, field visit), provide training courses and invite IPs to assess their own work performance and impact.</p>	<ul style="list-style-type: none"> • IPs 	PMU	<ul style="list-style-type: none"> • Activity/ accomplishment reports • Annual Reports 	Initial and annual	In-house
	<p>1.10 As part as local mobilization, Communities will be trained on ecosystem services, ecosystem maintenance and how agriculture can benefit from ecosystem and impact ecosystems, in particular where the ADB-supported infrastructure will be implemented.</p> <p>1.11 Awareness raising on incidental take of wildlife</p>	<ul style="list-style-type: none"> • Meetings with sub-groups and VOs and other stakeholders as relevant • Agriculture Department and farmers • Fisheries Department and Fisherfolk. 		<ul style="list-style-type: none"> • Activity/ accomplishment reports • Monitoring reports • Annual Reports 		
	<p>1.12 Communities will be consulted and sensitized on the need to conserve biodiversity and engaged in all such efforts.</p>	<ul style="list-style-type: none"> • Meetings with sub-groups and VOs and other stakeholders as relevant 	PMU	<ul style="list-style-type: none"> • Progress reports on stakeholder engagement activities 	Bi-annual	Integrated in the project's budget
	<p>1.13 Mainstream ecosystem-friendly activities into Value Chain plans (C1) and Income generation for young people (C2) Including training on efficient use of resources, climate-smart agriculture and aquaculture and principles in relation to pest management and soil fertility, in line with relevant activities in each project site.</p>	<ul style="list-style-type: none"> • Key informant interviews • Meetings with sub-groups, VOs and NGOs. 		<ul style="list-style-type: none"> • Activity/ accomplishment reports 		

	1.14 Calls for tenders for ponds will set clear guidelines to avoid damaging mangrove and wetland	<ul style="list-style-type: none"> • Tender specifications for contractors 		<ul style="list-style-type: none"> • Call for tenders 	Each tender for ponds	
	1.15 Under Component 2 and 3, innovation to adapt to saline environment will be promoted	<ul style="list-style-type: none"> • 		<ul style="list-style-type: none"> • 		
2. Resource Efficiency and Pollution Prevention						
Unsustainable use/production of natural resources	2.1 Procure natural-resource commodities certified under appropriate certification and verification systems	<ul style="list-style-type: none"> • SEP • Tender specifications (using ecolabel and environmental product declaration) • Agr. Extension • Input interest groups, VOs including smallholders 	PIU, Local Government Units	<ul style="list-style-type: none"> • Annual Reports • Activity Reports • Call for tenders 	Quarterly	Lodged with Contractor
	2.2 Extraction of construction aggregates only from approved quarry sites					
	2.3 Limit to suppliers that can demonstrate that they are not contributing to significant conversion or degradation of natural or critical habitats					
	2.4 Application of integrated water resources management principles for all promoted activities					
	2.5 Promote water saving approaches and improving water use efficiencies where relevant					
Pollution of ecosystems and water bodies, biodiversity losses due to inappropriate use of agri-chemicals (fertilizers and pesticides)	2.6 Provide training or capacity-building on proper selection, distribution, storage, application, and disposal of pesticides (including biopesticides) and fertilizers (including compost)_ see the annex 2 on agrochemical in the ESMCP note_. Where agrochemicals are necessary, an integrated pest and fertilization management plan is prepared following this annex.	<ul style="list-style-type: none"> • VC interest groups, including landowners • Agricultural Extension service 	PMU	<ul style="list-style-type: none"> • Activity Reports • Management Plan 	Bi-annual	Integrated in the project's budget C1
	2.7 Provide adequate training to agro-dealers on the specifications and quality control of agro-chemicals	<ul style="list-style-type: none"> • Fertilizers and agro-chemical dealers. • Agr. Extension Department 	PIU	<ul style="list-style-type: none"> • Activity reports 	Bi- Annual	

	2.8 Awareness raising activities about the advantages and opportunities provided by agroecology and climate-smart agriculture to landowners for efficient water use, quality seeds and best agronomical practices	<ul style="list-style-type: none"> • Agr. Extension, Social Mobilization Partners (SMP) Input Interest Groups and land owners 	PMU and SMP	<ul style="list-style-type: none"> • Activity and progress reports 	Bi-annual	
	2.9 Conduct activities to manage soil salinity: <ul style="list-style-type: none"> • Test soil for electrical conductance (EC) to determine the extent of the problem at sub-project/site level • Identify salt-tolerant crops and fodder • Reduce excess water to control excess salt movement • Ensure use irrigation water and drainage systems to wash salts down the soil profile. Develop site-specific management plans 	<ul style="list-style-type: none"> • Agr. Extension, VOs, landowners 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	
	2.10 Explore the implementation of agriculture/aquaculture combined systems	<ul style="list-style-type: none"> • Agr. Extension, Fisheries Department, Fisherfolk and VOs. 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	
risk of overfishing and fishing related pollutions	2.11 Development of a comprehensive and accurate baseline information on fish stocks + predicting potential impacts of fisheries operations, and evaluating the significance of these impacts	<ul style="list-style-type: none"> • Sindh Livestock and fishery • SEP • PMU/PIU ADB 	PMU	<ul style="list-style-type: none"> • Annual reports • Activities reports 	Annual	Lodged in C3
	2.12 Develop fishery management plans for optimum sustained yields at concerned VO level.	<ul style="list-style-type: none"> • Fisheries Department • VOs 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	
	2.13 Training on fish grading and processing of fish-waste for fish feed in aquaculture production	<ul style="list-style-type: none"> • Fisheries Department • VOs 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	
	2.14 Training and awareness raising of fishers and vessel operators (on damage due to fishing equipment and practices)	<ul style="list-style-type: none"> • Fisheries Department • VOs • Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	

	2.15 <i>Promotion</i> of selective fishing gear and improved fishing gear technology	<ul style="list-style-type: none"> • Fisheries Department • Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	
	2.16 <i>Provision</i> of oil disposal sites	<ul style="list-style-type: none"> • Fisheries Department • VOs • Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	
	2.17 Promoting energy-efficient stoves for fish smoking and other equipment for fish drying	<ul style="list-style-type: none"> • Fisheries Department • VOs • Fishers 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	
	2.18 Mobilizing fisherfolks organizations/cooperatives and/or <i>promoting</i> their creation	<ul style="list-style-type: none"> • Fisheries Department • Concerned VOs 	PMU and SMP	<ul style="list-style-type: none"> • progress reports 	Bi-annual	
	2.19 Improvement of the Fish Value Chain (landing sites, <i>climate</i> -smart cold chains, access roads to landing sites) with the development of ecolabel	<ul style="list-style-type: none"> • Fisheries Department • Sindh Coastal Development Department. • Fisherfolk 		<ul style="list-style-type: none"> • progress reports 		
Pollution of waterbodies due to fishing nets and equipment	2.20 <i>Conduct</i> training on pollution reduction in fishing practices and promotion of natural materials for fishing <i>nets</i>	SEP	PMU	<ul style="list-style-type: none"> • Activity Reports • Annual reports 	annual	Integrated in the project's budget
Development of aquaculture production with related risks	2.21 Consult SEPA to ensure compliance with the necessary Environmental Impact Assessments (EIAs) or Initial Environmental Examinations (IEEs) for both inland and offshore aquaculture systems. 2.22 Siting fishponds and drawing up development plans that <i>ensure</i> equitable distribution of land and water resources among different users 2.23 <i>Adopting</i> climate-proof fish farming facilities	<ul style="list-style-type: none"> • Villages authorities and local communities • Sindh Livestock and fishery Department • SCMs • Private sector in fishery industry 	PMU	<ul style="list-style-type: none"> • Annual reports • Activities reports 	Annual	Lodged in C1

	<p>2.24 Ensure adequate pond water exchange and flushing <i>systems</i> and dilution or treatment of pond water prior to release and promote and test integrated agriculture/aquaculture systems</p> <p>2.25 Where possible use Integrated Multi-Trophic Aquaculture (IMTA) and Recirculating Aquaculture Systems (RAS) for offshore aquaculture.</p> <p>2.26 Ensure careful application of feeds, fertilizers and other <i>inputs</i> based on recommended standards to avoid excess usage and water pollution.</p> <p>2.27 <i>Regularly</i> monitor water quality in ponds and the wider environment to ensure that it meets required standards for the safe production of fish and aquaculture products. Special attention must be paid to excessive use of antibiotics.</p> <p>2.28 <i>Advocating</i> for eco-labelling fish farming products</p> <p>2.29 Ensure adequate training and support to fish farmers, especially to former fisherfolks</p> <p>2.30 <i>Collection</i> of the generated waste</p>					
Extraction, diversion or contaminated water	<p>2.31 <i>Recycling</i> and storing drainage water</p> <p>2.32 <i>Promote limited</i> irrigation system schemes</p> <p>2.33 Promoting water-saving approaches and improving water-use efficiencies in all sectors (incl. laser leveling technologies and soil-water conservation measures)</p> <p>2.34 Applying technical resource-efficiency measures such as <i>reverse</i>-osmosis-based water recovery</p> <p>2.35 Application of integrated water resources management <i>principles</i>. Promoting the preservation of water quality (integrated pest management and integrated soil fertility</p>	<ul style="list-style-type: none"> • Sindh Irrigation Department • Sindh Livestock and fishery Department • PMU/PIU ADB • VOs, farmers and aquaculturists 	PMU	<ul style="list-style-type: none"> • Activities reports 	Bi-annual	

	<p>management to minimize the use of agrochemicals; proper treatment of wastewater before it is discarded)</p> <p>2.36 Training on the importance of ecosystem services and <i>natural</i> water cycle, including the adequate ecological flows</p> <p>2.37 <i>Abbrev.</i> Impact assessment studies in case of rehabilitation/new irrigation scheme (in consultation with SEPA)</p>					
3. Cultural Heritage – Not Applicable						
4. Indigenous Peoples – Not Applicable						
5. Labor and Working Conditions						
Working conditions that do not meet national labor laws or international commitments (e.g. discriminatory practices)	<p>5.1 Raising awareness about child farm labour at farm level as part of the social mobilization</p> <p>5.2 Identify hazardous/dangerous practices where children participation will be restricted (such as aquaculture and risk of drowning)</p>	<ul style="list-style-type: none"> • SEP, FGDs, KII, IPs 	PMU	<ul style="list-style-type: none"> • SECAP • Monitoring Reports • Activity Reports • Accomplishment reports • Annual reports 	Bi-annual	Integrated into project
OHS risks	<p>5.3 Apply the precautionary principle and mitigation hierarchy related to working conditions</p> <p>5.4 Monitor all management and mitigation measures put in place by contractors/third-party workers</p> <p>5.5 Raising awareness about farm labour under heat waves and other extreme water conditions (session to organize during Climate Smart Agriculture training)</p> <p>5.6 Raising awareness about the safety risk related to chemicals such as pesticides, promote alternative approach for crop protection (crop rotation, biopesticides) and, if needed, support acquisition of appropriate equipment for</p>	<ul style="list-style-type: none"> • VOs • Extension services • local IPs • farmers & fisherfolks 	PMU CDU	<ul style="list-style-type: none"> • Monitoring Reports • Activity Reports 	Bi-annual	Integrated into project

	chemical application (session to organize during Climate Smart Agriculture training) 5.7 Inform landowners about forced work and abusive requests to sharecroppers					
6. Community Health, Safety and Security						
Risk of increase in vector-borne (ie malaria), water-borne (ie hepatitis) and other communicable diseases (i.e. Covid, AIDS)	6.1 Identify closest medical services 6.2 Promote hygiene and health practices in relation to project activities (in particular when livestock and drinking water provision)	• SCM, KII	PMU	• SECAP, • Annual reports, • RHU advisories • Accomplishment reports	Bi-annual	In-house
Potential increase of gender-based violence, including sexual harassment, exploitation and abuse in project areas	6.3 Adopt a “Do No Harm” approach and develop a gender strategy that will include specific actions to mitigate risks of Gender-Based Violence due to project initiatives in line with the Government of Sindh Sexual Violence Response Framework 2020-2024 and the Sindh Commission On The Status Of Women 2022-2024 Strategic Plan 6.4 Sensitize project beneficiaries of the grievance redress mechanism 6.5 Ensure gender balance among project staff, especially those involved in service delivery 6.6 Adapt facilities set-up and services delivery to ensure they are accessible, safe and convenient for women and girls, taking into consideration their age, disability status, and residency status 6.7 Conduct regular consultations with women and girls, paying attention to groups who may be particularly vulnerable. This may require organizing women-only groups of focus group discussions, with female facilitators or staff, to ensure women have the possibility to flag their concerns and interests as freely as possible 6.8 Create an enabling environment for women’s participation through the social mobilization	• KII	PMU	• SECAP • Activity reports	Annual	In-house

	<p>process and appropriate and purposeful communication (for example, targeting religious and traditional leaders and influential community members to ensure there is buy-in on women's participation in the project's activities and potential risks of tension and conflict within households and communities are mitigated</p> <p>6.9 Map the existence of adequate services for survivors/affected persons</p> <p>6.10 Ensure that contractors and suppliers include clear provisions regarding non-discrimination and prevention of sexual harassment and sexual abuse</p>					
Increase or alteration of traffic in project and neighboring areas.	<p>6.11 Road safety assessment</p> <p>6.12 Appropriate signalling</p> <p>6.13 Contractors to establish traffic management system during construction</p> <p>6.14 Establish GRM</p> <p>6.15 Coordinate with ADB</p>	<ul style="list-style-type: none"> • SCM, KII, ADB PMU 	PMU	<ul style="list-style-type: none"> • Road Safety Assessment • Consultation Documentation • Annual reports 	annual	Lodged with Contractor
7. Resettlement						
Conflicts due to change in land-tenure arrangements	<p>7.1 Stakeholder engagement (including sensitization of landowners)</p> <p>7.2 Local committees established to address issues</p>	<ul style="list-style-type: none"> • VOs • Landowners • IPs 	PMU, CDU	<ul style="list-style-type: none"> • 		
8. Financial intermediaries						
Financial intermediaries do not implement E&S safeguards to adequately support investments	<p>8.1 Ensure financial intermediaries prepare and implement adequate ESMS in line with SECAP policies prior to onlending activities</p>	<ul style="list-style-type: none"> • Meetings • Trainings • Tender specification • Due diligence before contractualization 	PMU	<ul style="list-style-type: none"> • Activity Reports • Management Plan • Monitoring reports • ESCMP of the selected financial institution 	Bi-annual	

9. Others						
Lack of active participation from vulnerable groups	9.1	During inception, review the SEP and GRM to update stakeholder matrix, engagement activities and GRM to ensure the establishment and maintenance of accessible and culturally and socially appropriate consultations	<ul style="list-style-type: none"> Workshops and meetings 	PMU	<ul style="list-style-type: none"> IEC Reports GRM Reports IEC materials Meeting reports Accomplishment reports / annual Reports 	Bi-annual
	9.2	Induction sessions with local communities and documentation of how the feedback received informed project activities	<ul style="list-style-type: none"> SCMs, meetings, FFS 		<ul style="list-style-type: none"> Minutes and progress reports on SEP with a specific session on feedback from stakeholders and how it informed was integrated in the project. 	Bi-annual
	9.3	Validate activities with local communities to ensure relevance and adequacy to local customs and conditions			<ul style="list-style-type: none"> 	
	9.4	Ensuring all stakeholder engagements include representation from the youth	<ul style="list-style-type: none"> Stakeholder Engagement Meetings 	PMU	<ul style="list-style-type: none"> Meeting minutes and attendance sheet with distinction of youth/women/other categories attending events. 	

VII. Annex 1. ESCMP implementation guidelines at early stage of the project

The initial implementation of the SCRCP will lead to the selection of villages, followed by the selection of value chains and the corresponding development plan. VC plans can thus be considered as subprojects; the current ESCMP analysis and matrix must serve as guidance to develop adapted and more concrete mitigation measures. Below are listed some guidelines to ensure that appropriate management plans are drawn up at subproject level. Furthermore, the PMU will have then to ensure that the proposed mitigation measures are included in the AWPB/costing and the M&E system.

A. Biodiversity:

a) Protected areas [related to mitigation measures 1.1 to 1.8]

- Contact the Sindh Environment Protection Agency (SEPA) to obtain an updated list of protected areas in the three districts (including coastal and marine areas), their location and the contact details of the authorities responsible for managing them.
- Check the localization of selected villages and their proximity to protected areas. When the distance from a protected area is less than 10 km, contact the management authority for this protected area. Under the supervision of the management authority, conduct an assessment of direct/indirect impacts of project activities (VC plans, planned infrastructures) and check the need for Environmental Impact Assessments (EIA) and Initial Environmental Examinations (IEE). Consult with local communities to ensure inclusion and ownership.

b) Ecosystems [related to mitigation measures 1.10 to 1.15 + 2.5]

- In each village, depending on its biodiversity and ecosystem context, IPs must draw the attention of the village community on ecosystem fragility, and the impacts of their economic activities. How income generation at village level is linked to ecosystem should be highlighted. PMU is invited to check training proposals of the IPs. Information provided shouldn't be theoretical but applied to the context to invite farmers/local communities to re-consider some of the practices affecting, at long term, these communities. Water use and water saving at household level should be considered (agricultural water and irrigation to consider under VC plan).
- Check training proposals of the IPs. Information provided shouldn't be theoretical but applied to the context to invite farmers/local communities to re-consider some of the practices affecting, at long term, these communities. This supposes IPs can analysis current context (practices, ecosystem fragilities).

B. Resource Efficiency and Pollution Prevention:

a) CSA and Agricultural practices [related to mitigation measures 2.8 to 2.11]

- An important stream of component 1 is to improve agricultural practices under the VC plans, with Climate Smart Agriculture and Agroecological approaches. The PMU is invited to provide an update on this issue in Sindh and identify key competences. To this end, PMU should contact various partners: (1) the Institute of Environmental Studies and the Department of Agriculture at Karachi University, (2) the Department of Soil Science and the Department of Energy and Environment at Sindh Agriculture University, FAO and its offices in Sindh based in

Hyderâbâd, (3) the Department of Agriculture, Supply, and Prices, its Directorate General Agriculture Extension Sindh, its ICT Agricultural Extension Services Center Sindh TIBCRAWM”).

- PMU should meet the extension service in Badin. These Officers have been trained and supported in climate-smart agriculture by FAO under the project “Transforming the Indus Basin with Climate Resilient Agriculture and Water Management”. Lessons learnt from this training and related extension implementation to farmers should be analyzed to develop training and advice on CSA under SCR. The extension service in Badin could be a relevant strategic partner to ensure training of trainers toward Thatta and Sujawal.
- The skills of IPs providing support to VOs, with regards of CSA, should be carefully assess and if necessary, training provided by the above-mentioned partners.
- These same contacts listed above (at 1.) should be also consulted on saline agriculture; the various proposals on saline agriculture developed in the SECAP note and the present note should be explored and elaborate (salt-tolerant crops and fodder; improved drainage and water management at field level)

b) Crop Pest and soil fertility management [related to mitigation measures 2.8 to 2.11]

- See annexe 2

c) Fishing activities [related to mitigation measures 2.12 to 2.21]

- Once the fishing villages have been selected, PMU based on local consultation, PMU should elaborate the proposed mitigation measures in parallel to the design of the VC plan
- Mitigation measures listed in the ESMP should be further discuss and assess with the Sindh Fisheries Department of the government of Sindh as well as WWF (Mr. Altaaf Sheikh. Snr Manager Conservation in Sindh)

d) Aquaculture [related to mitigation measures 2.22 to 2.29]

- Impact assessment of aquaculture project should be guided by a prior Environmental and Social Impact Assessment. SEPA can provide the threshold above which such assessments are mandatory.

e) Irrigation [related to mitigation measures 2.30 to 2.36]

- Once subprojects leading to water extraction, irrigation, drainage and water supply, Sindh Irrigation and Drainage Authority (SIDA) should be consulted to finetune related mitigation measure and draw up adapted management plan during and after works.
- Impact assessment of new irrigation schemes should be guided by a prior Environmental and Social Impact Assessment. SEPA can provide the threshold above which such assessments are mandatory.

C. Labour and working conditions

a) Labour risks [related to mitigation measures 5.1 to 5.7]

- Once the village and CV have been selected, PMU shall carry out a more in-depth assessment of the risks associated with the work and working conditions and, if substantial or high risks are raised, carry out a Labor Assessment Management Plan (LAMP) including:
 - Overview of labour use in the project: Number of project workers, Characteristics of project workers, Timing of labour requirements, Contracted workers, Migrant workers

- Assessment of key potential labour risks: description of the activities and related labor risks (hazardous tasks, child labor, forced labor, discriminatory practices, restrictions of freedoms of collective bargaining, presence of migrant and seasonal workers, potential labor influx, potential gender-based violence, limited implementation of OHS requirements)
- Brief overview of labour legislation (terms and conditions, and OSH)
- Policies and procedures applicable for the project (including terms and conditions, grievance mechanism for workers)
- Suggested training

VIII. Annex 2. Integrated Pest Management and Soil Fertility strategy in SCRP

Note for the PMU

A. Context

IFAD promotes the safe use of pesticides and fertilizers by ensuring that all projects include appropriate investments and capacity-building activities for the selection, distribution, storage, application and disposal of pesticides and fertilizers. This commitment covers coordinated use of pest and environmental information; pest and vector control methods; appropriate cultural practices; and biological, genetic (and as a last resort) chemical means to prevent unacceptable levels of pest damage. Where recourse to pesticide use is necessary, IFAD will ensure safe, effective and environmentally sound pest management in line with the World Health Organization (WHO) and Food and Agriculture Organization of the United Nations (FAO) International Code of Conduct on Pesticide Management.

In the case on SCRP, farmers, grouped under Producer/Interest Groups, will be supported to implement Value Chain plan (Component 1). Examples of Value Chain plan include crops production, high value crops that are nutritionally superior and climate-resilient, products aggregation, integrated farming (agriculture, livestock and fish), value addition and marketing, agri service provision, livestock for meat/fattening, dairy production, marketing, value addition, fisheries, aquaculture, mariculture, fisheries processing, preservation, grading, marketing, traditional crafts production/marketing etc.

Based on the value chain plan of each production, related interest groups will be supported through training and subsidised loans. The objective is to help people to be more resilience, thus analyse their situation, strengthen their professional network and adopt the best options with long term perspective. They need to fully understand the processes and practices for realization of the VC plans' objectives. Depending on the subject, training & supports will be delivered by IPs specialists, partner extension agencies and external specialized agencies like FAO in locations that are also accessible and safe for women. The trainings may cover, but are not restricted to, production practices and/or technologies, grading and packaging, aggregation and marketing, value addition/processing, adoption of higher value crops, selection of crops based on the income-earning potential, nutritional-superiority and climate resilience, efficient input use, climate adaptation, water conservation and efficiency, post-harvest loss reduction, off-shore/inland aquaculture (fish, shrimp, crab), farm services provision, off-farm income generation, traditional crafts, financial literacy, nutrition etc.

Where the value chain involves the use of pesticides and fertilisers in cultivation practices, IPs will support Producer/Interest Groups in Pest and Fertilizer management. The aim of this support is manifold: (i) to reduce the risk of environmental pollution, (ii) to improve occupational health and safety, (iii) to improve crop and soil health leading to better productivity, (iv) to reduce farmers' production costs, (v) to reduce farmer's technical and economic dependence on agrochemical suppliers.

B. Suggested approach:

The objective is to empower farmers in terms of pest and fertiliser management:

- (i) to understand the perception of the farmers regarding the pest pressure and the issue of soil fertility (current situation and past trends);
- (ii) to clarify the current practices with agrochemicals:
 - what agrochemicals are used (fertilisers, pesticides)?
 - where are they bought?
 - what is their quality (independent analysis should be carried out, as many claims are made about the dilution of agrochemicals before they are put on sale)?
 - do they respect Pakistan authorisations to use and market?
 - what are their prices?
 - what is the farmers' decision system for using agrochemicals (fertilizers and pesticides)? (and are they different from one farmer to another?)
 - what are their efficiency at field level (according to farmers)?

- how they are used and spread by farmers (frequency, preparation, equipment, PPE)?
- whether any illnesses have been observed as a result of their use (including whether any children have been found to be mentally handicapped)

All these questions and answers aim at (1) getting farmers to reflect and analyse their own practices; (2) for IPs to prepare their training based on farmers' needs and help them to understand their own challenge; propose to farmers integrated pest management plan and fertilization strategies based on organic practices as far as possible, meeting technical needs, economic objectives (links to the VC plan), and reducing health and environmental risks. IPs will provide training for farmers

- (iii) to be aware of risk for the environment and human health related to agrochemicals;
- (iv) to recognize the main pests and diseases affecting their crops;
- (v) to learn the possible strategies to reduce pressure of pest (crop rotation, crop association, biocontrol);
- (vi) to learn basis about soil and the possible strategies to improve soil fertility (including role of legume for fertilization and advantages of agroforestry);
- (vii) to learn how to produce their own biopesticides and fertilizers (with possible link to Component 2 as job opportunities);
- (viii) to draw up an integrated pest management plan and fertilization strategy adapted to their VC plan including objective in terms of yield and quality, and advise on adapted equipment and PPE
- (ix) to develop renewed relationship with agrochemical providers.

This initial phase could last 6 months and be developed in each village, grouping various Interested groups and VC plan. Some Farmer leaders should be identified to facilitate local support to Interest group members, host farmer field school sessions, ensure basic record and monitoring to report to the group regarding the VP plan objectives.

It is proposed that IPs could keep on in this support with (1) regular technical visits; (2) peer-to-peer sessions mixing various Interest groups to share their experience, results and practices through peer-to-peer session; (3) consultation with agro-dealers on the specifications and quality control of agro-chemicals so that suppliers are able to provide adapted products and equipment (represents of farmers should be included in this process), check of their license to sale agrochemicals, suggest adapted training.

Where the use of agrochemicals is planned under the VC plans, based on the above, IPs will prepare and integrated pest and nutrient management plan (for PMU and for farmers):

- (1) main pest and disease for the crops considered under the VC plan
- (2) strategies to reduce pest pressure
- (3) possible biopesticides (preparation, dosage, frequency of treatment, equipment including PPE)
- (4) as a last resort recommended pesticides complying with regulation (dosage, frequency of treatment, equipment including PPE, advice for buying on the market)
- (5) nutrient requirements and strategies to improve soil fertility
- (6) possible biofertilizers (preparation, dosage, frequency of application, equipment)
- (7) as a last resort recommended chemical fertilizers (advice for buying on the market)
- (8) monitoring and control; and estimated cost (for PMU)

C. IPs requirement

- Good technical level on pest management and soil fertility
- Experience in the context of Sindh agriculture sector (including input providers)
- Capacities to organise regular field visit and training sessions.

Annexure-13: Measuring Progress against the AWP/B

		Period:		Cumulative Appraisal		
		[Insert date: dd-m-yy]	to	[Insert date: dd-m-yy]	Actual	Target
Component/Outcome	Indicator	Unit	AWP&B	Actual	%	%
<i>Sub-component or Output</i>						
Component 1 /Outcome						
<i>Sub-component / Output</i>						
<i>Sub-component / Output</i>						
<i>Sub-component / Output</i>						
Component 2 / Outcome						
Component 3 / Outcome						
Component 4 / Outcome						

Annexure-14: Steps in the opening of Assignment Account/Designated Account

Designated Accounts/Foreign Aid Assignment Accounts/Revolving Fund Accounts (RFAs) are opened and maintained at National Bank of Pakistan with the approval of Finance Department and Accountant General (AG). This account is opened for foreign aided projects and is non-lapsable but requires re-authorization at the start of each fiscal year. Foreign Aid Assignment Accounts are governed through detailed executive notifications (*accounting procedures*) issued by the Finance Division from time to time – *the latest notification was issued in August 2013 for the revision of the procedures*. Following is the process for opening of RFA:

Step	Responsibility	Timeline	
1	Check, if the ADP of Sindh contains budget allocation. If not then initiate the process for allocation of budget through Technical Supplementary Grant via Finance Department.	Project Director or authorized officer of DA's in line department.	Upon signing of Grant Agreement
2	Send a request to the Administrative Secretary of the relevant government's department for opening of respective RFA. <i>The request will contain information such as account name, bank branch from where it will operate, authorized signatories and specimen signatures, budget head from which the allocation of funds will be made available, and any other condition for operation of the account;</i>	Project Director or authorized officer of DA's in line department.	Upon signing of Grant Agreement
3	The relevant Department Administrative Secretary/Principal Accounting Officer will approve the request for opening of RFA for onward submission to the FD for issuance of Sanction. <i>The request will include: Copy of PC I, Copy of Grant Agreement, Form A called the Sanction for opening of Assignment Account (contains the name of authorized officers and their specimen Signatures).</i>	Administrative Secretary	1 week
4	The Finance Department will give sanction for the opening of RFA and addressed to Accountant General's for the issuance of authority to the designated branch of the National Bank of Pakistan (NBP). <i>The authorization letter will be issued directly to NBP by the AG.</i>	Secretary Finance	1 week
5	The Accountant General's Office shall issue authority directly to NBP for opening of RFA and copy forwarded to line department. <i>The authority letter contains: Account Title, the bank branch from where it shall operate; Authorized cheque signatories and specimen signatures. Budget head from which the allocation of funds will be made.</i>	AG	1 week
6	Send copy of grant agreement, sanction of FD and authority of AG to the SBP through NBP for grant of NOC for opening of RFA.	Project Director or authorized officer of DA's in line department.	1 week
7	Submit an application to NBP for the opening of RFA along with the sanctions/approvals of FD/State Bank and AG. <i>The application will also include: Account opening form (duly</i>	Project Director or authorized officer of DA's in line department.	1 week

	<i>completed signed and stamped), the specimen signature card, the CNIC of authorized signatories.</i>		
8	NBP will issue a cheque book for withdrawing of grant/funds from the RFA.	NBP	1 week

Steps in Annual Revalidation/ Re-authorization of RFA

Step		Responsibility	Timeline
1	During first week of July each year, a request is sent to the Administrative Secretary of department for re-authorization of respective RFA. <i>The request will contain information such as account title & number, bank branch, authorized signatories for re-authorization/ revalidation of the RFA, which ceases to be operated on 30Th June every year.</i>	Project Director or authorized officer of DA's in line department.	First week of July every year
2	The relevant Department Administrative Secretary/Principal Accounting Officer will approve the request for revalidation/ re-authorization of RFA for onward submission to the FD for issuance of Sanction. <i>The request will include copy of the letter submitted as above.</i>	Administrative Secretary	Same week of receipt of above request letter
3	The Finance Department will review the request and grant sanction for the revalidation/reauthorization of the RFA through letter addressed to Accountant General's for issuance of authority to the designated branch of the National Bank of Pakistan (NBP).	Secretary Finance	1 week of receipt of the above letter & all documents
4	The Accountant General's Office shall issue authority directly to NBP for revalidation/reauthorization of RFA and copy forwarded to line department. <i>The authority letter contains: Account Title, bank branch; authorized cheque signatories and specimen signatures. Budget head from which the allocation of funds will be made. This authorization letter will be issued under SEAL Authority.</i>	AG	1 week of receipt of the above letter & all required documents

Important Instructions for Operating RFA (hereinafter referred as Designated Account)

- Any changes in the signatories will be approved by the Administrative Secretary of the relevant line department and circulated accordingly by the Project Director.
- All payments, except for an authorized petty-cash to be notified in writing by the Project Director to relevant NBP branch, shall be made directly to the recipients through 'payees account only' cheques after making due deductions.
- Except for the fund releases from IFAD, no deposits will be made in the Designated Account.

Annexure-15: Checklist for reviewing withdrawal applications

FORM 100 - APPLICATION FOR WITHDRAWAL	Yes or No
1. Sequential numbering of withdrawal application	
2. Withdrawal application amount tallies with sequentially numbered summary sheets	
3. Categories/subcategories charged according to schedule 2 of financing agreement	
4. Percentage of financing applicable for each category or subcategory	
5. Availability of funds in categories and the overall financing amount	
6. Currency of payment	
7. Completeness and accuracy of banking instructions	
8. Complete name and address of correspondent bank	
9. WA is signed by Authorized Representative	
10. Expenditure summary sheet by category attached	
STATEMENT OF EXPENDITURE	
1. Eligibility of expenditures claimed (a) Within SOE financial ceiling	
(b) Expenditures under specific category [] eligibility	
2. Form 102 supported by signed Form 101 (for items over the financial ceiling)	
DESIGNATED ACCOUNT – REPLENISHMENT REQUESTS	
1. Amount within ceiling figure agreed as a reasonable limit [-- US\$ or --]; or per AWP/B period	
2. Amount at least equal to 30 per cent of the advance or 3 months of expenditure;	
3. Amount agreed sufficient to cover a specific reporting period (revolving fund option)	
4. Exchange rate used	
5. Completeness of designated account banking and account details	
6. Enclosed designated account reconciliation and bank statements	
SUPPORTING DOCUMENTATION (attached when/if required)	
1. Copy of contract	
2. Copy of invoice, certified by Project Director	
3. Copy of bank guarantee and performance guarantee (for advance payment)	
4. Copy of delivery receipt	
5. Copy of evidence of payment	
6. Completed Form 101	
7. Completed Form 102 (A or B) including reference to AWPB, name of the supplier, invoice contract number, total contract value, date of payment, list of supporting documentation, and payment reference (bank/ cash)	
PROCUREMENT	
1. Copy of 'no objection(s)' provided by IFAD (attached)	
2. Copy of Contract Payment Monitoring Form(s) -duly Signed (attached)	
3. Copy of Register of contracts with reference to the procurement plan- duly signed (attached)	

<p>COMPLIANCE WITH CONDITION(S) FOR DISBURSEMENT</p> <p>1. In accordance with terms in section E of the Financing Agreement</p> <p>2. In accordance with terms in the Letter to the Borrower/Recipient</p>	
<p>EXPENDITURE INCURRED/COMMITTED BEFORE PROJECT COMPLETION DATE</p> <p>1. Expenditure verified as eligible:</p> <p>(a) contract signed before project completion date</p> <p>(b) goods delivered before project completion date</p> <p>(c) services completed and/or rendered before project completion date</p>	

Notes: Supporting Documentation

(i) For all cases described in (ii) through (vi) below:

- ✓ The signed contract or confirmed purchase order – showing the specified amount that is due to be paid;
- ✓ The bank guarantee for advance payment, as specified in the contract documents;
- ✓ The bank guarantee for performance, as specified in the contract documents;
- ✓ Copies of communications sent by the IFAD country programme manager to the lead project agency providing the 'no objection' (whether post or prior) to the contract award; and
- ✓ Evidence of payment.

(ii) For payment of goods, in addition to (i):

- ✓ Supplier's invoice, duly certified for payment by the project director – specifying the goods, their quantities, and prices;
- ✓ Bills of lading or similar documents; and
- ✓ As appropriate, the certificate of delivery (to include condition of goods on delivery).

(iii) For payment of consultants' services and other services, in addition to (i):

- ✓ The supplier's or consultant's claim, duly certified for payment by the project director and showing sufficient detail. If such services relate to the importation of goods (for example, freight and insurance payments), adequate reference should be given to enable the Fund to relate each of these items to specific goods whose cost has been or is to be financed by the financing closing date; and
- ✓ As appropriate, a certificate of delivery of satisfactory services. If the consultant provided training it should be specified how many workshops/people trained together with a list of participants. If the Consultant developed a manual or a study this study should be attached or indicated in the certificate, etc.

(iv) For progress and retention payments of civil works, in addition to (i):

- ✓ The claim of the contractor, including a financial progress report, stating the work performed and the amount due;
- ✓ A certificate – signed by the project consultants or owner's representative, if any, or by the borrower's chief engineering officer or resident supervising engineer assigned to the project, to the effect that the work performed is satisfactory and the payment claimed is due in accordance with the terms of the contract; and

✓ A copy of the contract payment monitoring form.

(v) For payment of credit lines/grants etc.. in addition to (i):

- ✓ Duly certified financial reports;
- ✓ Copies of the sub-agreements with the MFIs;
- ✓ Approved minutes of the technical committee (if applicable); and/or
- ✓ Payment requests from the MFI and evidence of payment.

(vi) For payment of Trips, fuel, stationary and other expenses in addition to (i):

- ✓ Supplier invoices;
- ✓ Evidence of payment;
- ✓ Back to office report;
- ✓ Travel authorization; and/or
- ✓ Expense reports by the traveller (including invoices).

Annexure-16: Designated Account Reconciliation (Imprest Fund)

Designated Account Reconciliation Statement (imprest account)				
Designated Account No:				
Bank Name:				
1. Total Advanced by IFAD				USD _____
2. Less total amount recovered by IFAD				USD _____
3. Equals present outstanding amount advanced to the designated account (line 1 less line 2)				USD _____
<hr/>				
4. Balance of designated account per attached bank statements as of (Date: day/month/year)				USD _____
5. Plus balance of the project account(s) (listed separately)				USD _____
Plus balance of sub accounts (listed separately)				USD _____
Plus balance of Cash in Hand				USD _____
Total of Bank Balances (designated A/C, PA, SUB accounts & cash in hand balance) (line 4+line 5)				USD _____
6. Plus total amount claimed in this WA no.				USD _____
7. Plus total amount withdrawn from the designated/PA/Grant account and not yet claimed for replenishment) or WAs pending submission				USD _____
8. Plus amounts claimed in previous applications but not yet created at the date of bank statement and/or claimed after date of bank statement				USD _____
	Application No.	Date	USD	Amount
			\$	
			\$	
			\$	
9. Minus Interest earned (to be completed. If zero, please enter zero)				USD _____
10. Total Advance accounted for (line 5 through line 9)				USD _____
11. Explanation of any difference between the totals appearing in Lines 3 and 10				USD _____
e.g.	Non eligible amount to be refunded to the designated account			USD _____
e.g.	calculation errors in application of percentage financing counterpart financial resources to be			USD _____

Annexure-16: Sample Financial Statements

STATEMENT OF RECEIPTS AND PAYMENTS (BY CATEGORY OF EXPENDITURES) FOR THE YEAR ENDED June 30, 201X

	Ref.Note	20XX	20XX	Cumulative
Receipts from IFAD				
Initial Deposit				XXX
Replenishments to SA		XXX	XXX	XXX
IFAD Direct Payments	5	XXX	XXX	XXX
Government Funds	6	XXX	XXX	XXX
Other Donors	7			
Other Receipts	8			
TOTAL FINANCING		XXX	XXX	XXX
PROJECT EXPENDITURES: (BY CATEGORY OF EXPENDITURES)				
IFAD Financed				
Vehicles, Motorcycles and Equipment	9	XXX	XXX	XXX
Technical Assistance, Trainings, workshops and Studies		XXX	XXX	XXX
Support for Adaptive Research		XXX	XXX	XXX
Support for Knowledge Management and Communication		XXX	XXX	XXX
Support for Improved Agricultural Extension		XXX	XXX	XXX
Support for Access to Key Agricultural Inputs		XXX	XXX	XXX
Salaries and Allowances		XXX	XXX	XXX
Incremental Operating Costs		XXX	XXX	XXX
		XXX	XXX	XXX

SAMPLE
STATEMENT OF RECEIPTS AND PAYMENTS (BY CATEGORY OF
EXPENDITURES) FOR THE YEAR ENDED
June 30, 201X

<u>Cumulative</u>	<u>Ref.Note</u>	<u>20XX</u>	<u>20XX</u>	<u>20XX</u>
Government Funds				
Vehicles, Motorcycles and Equipment	#	XXX	XXX	XXX
Technical Assistance, Trainings, Workshops' and Studies		XXX	XXX	
XXX				
Support for Adaptive Research		XXX	XXX	XXX
Support for Knowledge Management and				
Communication		XXX	XXX	
XXX				
Support for Improved Agricultural				
Extension		XXX	XXX	
		XXX		
Support for Access to Key Agricultural				
Inputs		XXX	XXX	
XXX				
Salaries and Allowances		XXX	XXX	XXX
			Incremental	
			Operating	
			Costs	
				XX
		X		
				XX
		X		
		<u>XXX</u>	<u>XXX</u>	
				XX
		X		
				<u>XX</u>
		<u>X</u>		
TOTAL PROJECT EXPENDITURES		XXX	XXX	
		XXX		
BALANCE C/F	4	XXX	XXX	
		XXX		

SAMPLE
STATEMENT OF RECEIPTS AND PAYMENTS (BY
COMPONENT) FOR THE YEAR ENDED JUNE 30, 201X

	Notes	Cumulative to date		
		201X	201X-1	MWK
Balance B/F	4	MWK XXX	MWK XXX	MWK
FINANCING				
IFAD Credit				
Initial Deposit				XXX
Replenishments to SA		XXX	XXX	XXX
IFAD Direct Payments	5	XXX	XXX	XXX
Government Funds	6	XXX	XXX	XXX
Other Donors	7			
Other Receipts	8			
TOTAL FINANCING		XXX	XXX	XXX
PROJECT EXPENDITURES:				
(BY COMPONENT)				
IFAD				
Adaptive Research and Knowledge Management				
Adaptive Research		XXX	XXX	XXX
Knowledge Management and Communication		XXX	XXX	XXX
		XXX	XXX	XXX
Farmer Adoption of GAPs				
Awareness Raising and Sensitisation		XXX	XXX	XXX
Access to Key Agricultural Inputs		XXX	XXX	XXX
		XXX	XXX	XXX
Programme Management and Coordination		XXX	XXX	XXX
		XXX	XXX	XXX
Government Funds				
Adaptive Research and Knowledge Management				
Adaptive Research		XXX	XXX	XXX
Knowledge Management and Communication		XXX	XXX	XXX
		XXX	XXX	XXX
Farmer Adoption of GAPs				
Awareness Raising and Sensitisation		XXX	XXX	XXX
Access to Key Agricultural Inputs		XXX	XXX	XXX
		XXX	XXX	XXX
Programme Management and Coordination		XXX	XXX	XXX
		XXX	XXX	XXX
TOTAL PROJECT EXPENDITURES		XXX	XXX	XXX
BALANCE C/F	4	XXX	XXX	XXX

SAMPLE
STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS
FOR THE YEAR ENDED JUNE 30, 201X

		201X Budget	201X Actual	Variance
	Notes	MWK	MWK	MWK
FINANCING				
IFAD Credit				
	Replenishments to SA	XXX	XXX	XXX
	IFAD Direct Payments	XXX	XXX	XXX
	Government Funds	XXX	XXX	XXX
	TOTAL FINANCING	XXX	XXX	XXX
PROJECT EXPENDITURES: (BY CATEGORY OF EXPENDITURES)				
Cat	IFAD Financed			
	Vehicles, Motorcycles and			
1	Equipment	XXX	XXX	XXX
	Technical Assistance,			
	Trainings, workshops and			
2	Studies	XXX	XXX	XXX
	Support for Adaptive			
3A	Research	XXX	XXX	XXX
	Support for Knowledge			
	Management and			
3B	Communication	XXX	XXX	XXX
	Support for Improved			
4A	Agricultural Extension	XXX	XXX	XXX
	Support for Access to Key			
4B	Agricultural Inputs	XXX	XXX	XXX
	5 Salaries and Allowances	XXX	XXX	XXX
	6 Incremental Operating Costs	XXX	XXX	XXX
		XXX	XXX	XXX

SAMPLE
STATEMENT OF COMPARISON OF BUDGET AND ACTUAL
AMOUNTS FOR THE YEAR ENDED JUNE 30, 201X

		201X Budget	201X Actual	Variance
Notes		MWK	MWK	MWK
Government Funds				
1	Vehicles, Motorcycles and Equipment	XXX	XXX	XXX
2	Technical Assistance, Trainings, workshops and Studies	XXX	XXX	XXX
3A	Support for Adaptive Research	XXX	XXX	XXX
3B	Support for Knowledge Management and Communication	XXX	XXX	XXX
4A	Support for Improved Agricultural Extension	XXX	XXX	XXX
4B	Support for Access to Key Agricultural Inputs	XXX	XXX	XXX
5	Salaries and Allowances	XXX	XXX	XXX
6	Incremental Operating Costs	XXX	XXX	XXX
		<u>XXX</u>	<u>XXX</u>	<u>XXX</u>
TOTAL PROJECT EXPENDITURES		XXX	XXX	XXX
Surplus/Deficit for the period		XXX	XXX	XXX

The excess/deficit of actual expenditures over the Budget of 10% was due to....

SAMPLE

**STATEMENT OF DESIGNATED ACCOUNT ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 201X**

Account No: _____
Bank: _____
Address: _____

				USD	MWK
Opening Balance	Notes			XXX	XXX
Add:					
IFAD Replenishments:					
Date	WA No	XXX			
Date	WA No	<u>XXX</u>		XXX	XXX
		XXX			
Bank Interests				XXX	XXX
Total				XXX	XXX
Deduct:					
Transfers to Operating Accounts:					
Date		XXX			
Date		<u>XXX</u>		XXX	XXX
		XXX			
Bank Charges				XXX	XXX
Exchange Rate Difference					XXX
Closing Balance as at 30/06/201X (as per Bank Statement)				XXX	XXX

SAMPLE
STATEMENT OF DESIGNATED ACCOUNT RECONCILIATION
FOR THE YEAR ENDED JUNE 30, 201X

Account No: _____
Bank: _____
Address: _____

		USD	MWK
	Notes		
1	Initial Deposit	XXXX	XXXX
2	Less amount(s) recovered:	XXXX	XXXX
3	Outstanding Amount advanced	XXXX	XXXX
Represented by:			
4	Special Account Balance as at 30/6/201X	XXXX	XXXX
5	Plus amounts claimed but not yet credited as at 30/6/201X:		
	WA XXX Date		
	WA XXX Date		
	XXX	XXXX	XXXX
Plus amounts withdrawn not yet claimed, composed of:			
Was Prepared not yet submitted:			
	WA XXX		
	WA XXX		
	XXX		
	WAs not yet prepared: XXX		
6	Total amount withdrawn not yet claimed	XXXX	XXXX
7	Less Interest earned and/or plus Bank charges (if included in the Special Account)	XXXX	XXXX
8	Total Designated Account Advance as at 30/6/201X	XXXX	XXXX
	Difference between Line 3 and line 8	XXXX	XXXX

Notes:

- a Explain any difference between lines 3 and line 8
- b Indicate if amount in line 6 is eligible for financing by IFAD and provide reasons for not claiming

SOEs-WITHDRAWAL APPLICATION STATEMENT
FOR THE YEAR ENDED JUNE 30, 201X
By Category of Expenditure

Note	Category Description	Category Description	Total	In USD (Equivalent)	Rejected from IFAD	Net Reimbursed
Category No.	1	2				
Withdrawal Application #	Xxx Xxx Xxx	Xxx Xxx Xxx		Xxx	xxx	xxxx
Total						
W/A Pending Submission						
Withdrawal Application #	XXX XXX XXx	Xxx Xxx Xxx		xxxx	xxx	xxxx
Total	xxx	xxxxx		xxx	xxx	xxx

Note: Withdrawal Applications are submitted for reimbursement to IFAD using the historical exchange rate of the transfers to the Operating Account. Expenditures partially or totally rejected by IFAD (if any) should be detailed here. This statement should be reconciled with the Statement of Receipts and Payments

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED JUNE 30, 201X

FINANCIAL REPORTING UNDER INTERNATIONAL PUBLIC SECTOR ACCOUNTING STANDARDS (IPSAS)

In accordance with International Public Sector Accounting Standards (IPSAS), notes to the financial statements of an entity should:

- Present any information about the basis of preparation of the financial statements and the specific accounting policies selected and applied for significant transactions and other events, and
- Provide additional information **which is not presented on the face of the financial statements but is necessary for a fair presentation of the entity's cash receipts, cash payments, cash balances and other statements as statement of financial position**

SIGNIFICANT ACCOUNTING POLICIES

The principle accounting policies adopted in the preparation of these financial statements are set out below:

A Basis of Preparation: The financial statements have been prepared in accordance with International Public Sector Accounting Standards (IPSAS) with particular emphasis on Cash Basis Financial Reporting under the Cash Basis of Accounting

B Cash Basis of Accounting: The cash basis of accounting recognizes transactions and events only when cash is received or paid by the entity.

C. Foreign Currency Transactions: Foreign currency translation for the income and expenditure account items are converted using the actual historic exchange rate at the conversion from designated to local account. Where part of the expenditures has to be met from the proceeds of subsequent draw-downs from designated to local account, this is done on First in First out (FIFO) basis. All local expenditures paid from the local accounts/currency are translated back to the USD at the actual rate used for the transfer from designated to local account. Cash balances held in foreign currency are reported using the closing rate. Gains/Losses on foreign currency transactions/balances are dealt within the Statement of Designated Account Activities

BUDGET

The budget is developed on the same accounting basis (cash basis), same classification and for the same period as the financial statements. Material variances (above XXX) have been explained as notes to the financial statements

DIRECT PAYMENTS

These payments were made directly by IFAD from the Loan/Grant account to the specified supplier/service provider in accordance with the terms and conditions of the financing Agreement

Note: Include here details of direct payments, WA, Date, currency and amount received, amount in local currency

CASH/FUND BALANCES Reconciliation

	201X MWKXXX	201X-1 MWKXXX
Cash Accounts		
Advances	XXX	XXX
	XXX	XXX

Analyses of aging of advances to be included detailing and providing reasons for long outstanding advances

CASH DETAILS

	200X MWK	200X-1 MWK
A/c No _____ Project Operating/ Holding Account	XXX	XXX
A/c No _____ IFAD Designated Account (as per SA Statement)	XXX	XXX
Petty cash	XXX	XXX
	XXX	XXX

GOVERNMENT COUNTERPART FUNDS

Details here. Cumulative contributions, yearly contributions (compared to budget). For information only Include details of tax treatment and counterpart contributions as tax exemption.

BENEFICIARIES CONTRIBUTION

Details here. Cumulative contributions, yearly contributions (compared to budget).

OTHER DONOR FUNDS

200X MWK	200X-1 MWK
-------------	---------------

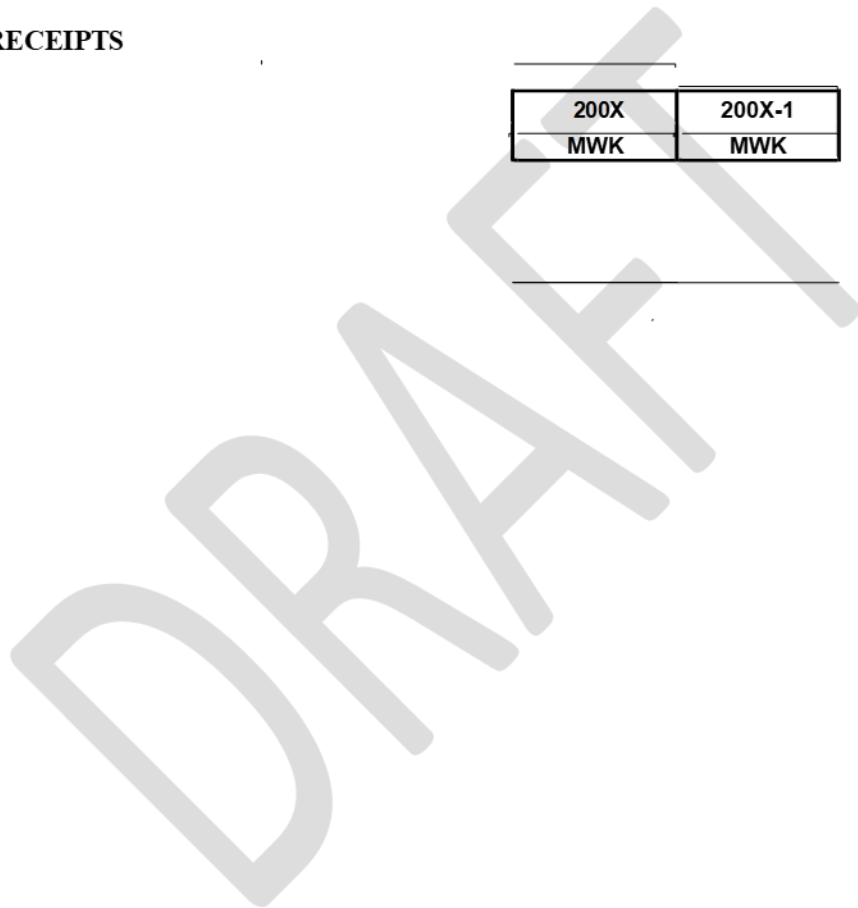
List of Donors

XXX	XXX
XXX	XXX
XXX	XXX
XXX	XXX

Add details of cumulative and expected contributions

OTHER RECEIPTS

200X MWK	200X-1 MWK
-------------	---------------



YEARLY PROCUREMENTS

Include here a list of the yearly procurements including methods

ALLOCATION AND USE OF THE FUNDS OF THE LOAN/GRANTS

	Allocated		Disbursed		Available Balance	
	SDR	USD	SDR	USD	SDR	USD
1 Category Vehicles, Motorcycles and Equipment	XXX	XXXX	XXXX	XXXX	XXXX	XXXX
2 Technical Assistance, Trainings, workshops and Studies	XXX	XXXX	XXXX	XXXX	XXXX	XXXX
3A Support for Adaptive Research	XXX	XXXX	XXXX	XXXX	XXXX	XXXX
3B Support for Knowledge Management and Communication	XXX	XXXX	XXXX	XXXX	XXXX	XXXX
4A Support for Improved Agricultural Extension	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
4B Support for Access to Key Agricultural Inputs	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
5 Salaries and Allowances	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
2 Incremental Operating Costs	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX

RECONCILIATION OF FUNDS DISBURSED BY IFAD AND FUNDS RECEIVED BY THE PROGRAMME

Annexure-17: Guidelines for Interim Financial Reporting

Interim Financial Progress Reports (Minimum requirements/mandatory reports)

Type of report	Disclosed Information	Remarks
<p>Report 1: Sources and Uses of Funds (all financiers)</p>	<p>This report discloses:</p> <ul style="list-style-type: none"> - how much funds the project has received from different financing sources; - how these funds have been spent by expenditure category during the reporting period as well as cumulative. - the opening and closing projects cash bank balances. 	<ul style="list-style-type: none"> • This report is part of project financial statements. • The Statement of Sources and Uses of funds should include payables and receivables as well as exchange rate differences (unrealized) to allow for the conversion of opening and closing bank balances to a different reporting currency. Adding receivables and payables makes the report fit modified cash and accrual basis of accounting • Prepared in the functional/presentation currency of the entity. • Only cash Beneficiary contribution should be reported. Not in-kind • Aggregate cash forecasts can be added to provide information that would facilitate disbursement planning. • Funds provided by other donors to programme should be included or disclosed, even if these are provided bilaterally to the same programme.

<p>Report 2: Summary of Expenditures by Loan Categories and By Financiers</p>	<p>This report discloses how much funds the project has received from each financier and how these sources have been spent by project category. This report also discloses the hard commitments (contracts signed but not yet paid) per category and financiers</p>	<ul style="list-style-type: none"> • Variation of this report already part of the Project financial statements (sources and uses of funds) • Prepared in the functional/presentation currency of the entity. • Amounts referring to Financing Agreement / should also be expressed in the same currency as the expenditures to allow for comparison of a versus actual expenditures. <p>Only cash Beneficiary contribution should be reported. Not in-kind</p>
<p>Report 3: Financial performance by financier by component</p>	<p>This report discloses:</p> <ul style="list-style-type: none"> - how much funds the project has received from each financier ; - how these funds have been spent by project component during the reporting period and cumulatively. - The report also compares these figures with the targets set in the Annual Work plan and Budget and the Project design report (PDR). 	<ul style="list-style-type: none"> • Variation of this report already part of the aide memoire (main text and table 3b of annex 3) • Prepared in the functional/presentation currency of the entity. • Amounts referring to AWPB and PDR should also be expressed in the same currency as the expenditures to allow for comparison of design/budget versus actual expenditures. • Only cash Beneficiary contribution should be reported. Not in-kind
<p>Report 4: Special/Designated Account Reconciliation Statement Imprest account/revolving fund</p>	<p>This report discloses and tracks the funds received through the Designated account.</p>	<ul style="list-style-type: none"> • Part of project financial statements and submitted together with Withdrawal Applications SA/DA replenishment requests • The currency of the Designated Account reconciliation statement should be in the currency of the designated account.

<p>Report 5: Statement of Expenditures/Disbursement - Withdrawal Application Statement</p>	<p>This reports discloses the disbursed funds by Withdrawal Application and Category. It also lists the Withdrawal Applications pending submission to IFAD. Disbursement method used for each WA is disclosed.</p>	<ul style="list-style-type: none"> • Normally part of Project financial statements. • The amounts of the statement should be expressed in two currencies - the currency of the Designated account (for Replenishments) and the currency of the WA or currency in which transactions are recorded in the accounting software (Usually local currency) • The expenditures of the Disbursement statement should be categorized by Withdrawal application and disbursement method. The FMS/Finance Officer should make sure that all WA including direct payments, reimbursements and letter of credits are included in statement.
<p>Report 6: Project cash flow forecast</p>	<p>This report discloses the breakdown of the project's cash forecast for the following two quarters by financier. The breakdown includes opening and closing balances of the different accounts as well as estimated income and from different financiers and estimated expenditures by category.</p>	<ul style="list-style-type: none"> • Required by IFAD only on ad hoc basis. Should be part of the projects monthly internal reporting (for management use)
<p>Report 7: Progress report on Audit recommendations</p>	<p>This report summarizes all the recommendations made by the external auditors of the project, the project management's action plan to address these recommendations and the current status of these planned actions..</p>	<ul style="list-style-type: none"> • Should be Part of the external audit report and management letter

Sample Supplementary Interim Financial Progress Reports (Minimum requirements)

Sample Optional reports depending on the project's activities and the project risk profile		
Type of report	Disclosed Information	Remarks
Physical and Financial Progress report	This report captures the physical progress made and links it to the cost. The report also compares the actual cost and physical progress with targets and cost estimates set in the AWPB and the PDR	<ul style="list-style-type: none"> • Suitable for civil works such as road construction, irrigation pipelines, hill lakes etc.. • Use simplified or proxy indicators of physical progress, consistent with M&E design where possible. • For 'soft' expenditures output indicators may be explored when feasible (e.g. number of training events held for Training expenditures)
Rural finance-credit line report	This report captures all the expenditures incurred (micro loans & grants disbursed) under the microfinance component/credit line category. The report discloses the individual grants and loans disbursed during the reporting period by financing source and compares them with the AWPB.	<ul style="list-style-type: none"> • Suitable for rural finance components including loans, matching grants, grants etc.
Implementing Partner monitoring	This report discloses the advances paid to the different implementing partners. It also discloses the justified amount and the outstanding balance of the contract.	<ul style="list-style-type: none"> • Suitable for projects/activities implemented by several implementing partners.
Training and workshop monitoring report	This report discloses expenditures related to different training events. It also discloses the number of events held and number of participants in each event.	<ul style="list-style-type: none"> • Suitable for projects/activities characterized by training, technical assistance and capacity building. • Appropriate only when such expenditure is a significant

		<p>proportion of total financing provided.</p> <p style="text-align: right;">116.</p>
Project Management Cost	<p>This report discloses the breakdown of expenditures incurred within the project management cost component/category. This report also compares the actual expenditures with the AWPB for the reporting period and an the cumulative expenditures against the allocation as per the PDR/Financing agreement.</p>	<ul style="list-style-type: none"> • Usually a variation of this report if part of Project financial statements and should also be examined during supervision missions and hence part of the aide memoire.
Fixed asset register	<p>This report discloses all the fixed assets, their location, purchase value, tag number etc.. Maintaining an up-to date fixed asset register is an important Internal control element reducing risk of misuse and theft.</p>	<ul style="list-style-type: none"> • Recommended to be part of the Project financial statements

Annexure-18: TORs of Internal Audit

A. Introduction

International Fund for Agriculture Development (IFAD) is a specialized UN Agency to finance agricultural development projects, primarily for food production in the developing countries with a focus on eradicating poverty. IFAD provides financing primarily for projects and programmes specifically designed to introduce, expand or improve food production systems and to strengthen related policies and institutions. IFAD is funding several initiatives in Pakistan in line with its mission. The Sindh Coastal Resilience Project is being implemented for the same objectives.

Planning and Development Board, Government of Sindh is the Lead Implementing Agency for the Project. A Project Management Unit (PMU) is established under P&D with three (3) District Coordination Units for implementation. The DCUs are based in Badin, Sujawal and Thatta. Basic information on the SCR Project is provided below.

B. Project objectives, geographic area of intervention and target groups

SCR goal is to reduce poverty and malnutrition and improve climate resilience among rural poor households, incorporating a gender-sensitive, youth-focused, nutrition-sensitive and climate change-responsive approach.

Project Development Objective (PDO)³⁸ is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production and productivity of organized groups of smallholder farmers and fisherfolk under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and financial services; (ii) Improved productive asset base for the ultra-poor and increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilitates access to natural resources and support services.

Project Target Groups: Project target groups include smallholder farmers (up to 16 acres of land), tenants and sharecroppers working on large land holdings, resource poor fisherfolk and landless poor daily wage earners. There are 115,650 farms in the three target districts out of which 96,600 farms can be categorized as small farms.³⁹ 84 percent of households are landless and earn their living as tenants, sharecroppers and daily wage earners. There are around 11,000 fisherfolk households and 90 percent of them work as hired hands on other's boats. Women headed households will be in particular targeted. Young men and women from poor households with a poverty score of 0-32⁴⁰ will be offered opportunities for skill development for labour market, value chain participation and off-farm enterprises. Gender and youth will be mainstreamed in all facets of planning, implementation and outcomes. Of direct beneficiaries, **40 percent will be women and 30 percent youth**. Among youth a 60:40 ratio will be ensured for males and females respectively.

Project Beneficiaries: An estimated 260,000 households (1.3 million persons), almost 33 percent of the total rural households in the three districts, will directly and indirectly benefit from the project interventions in value chain development, community and value chain support infrastructure, access to

³⁸ Of IFAD parallel financed component in SCR.

³⁹ Pakistan Bureau of Statistics. 2016

⁴⁰ Households in 0-32 band in NSER are considered ultra-poor and poor and eligible for UCT under BISP

credit and productive assets and vocational training. Smallholder farmers, fisherfolk and landless poor in 500 revenue villages (*Deh*) will be engaged through 500 inclusive Village Organizations in first five years of project implementation (160 in Badin, 125 in Sujawal and 215 in Thatta). Under each VO, an umbrella VO plan will identify the interest based on commonality of production base, vocation and sources of livelihoods, leading to individual interest group value chain plans. The umbrella plans will also identify priority community and value chain infrastructure deficits that need to be addressed. The umbrella plan and interest group plans will be prepared and supervised with the assistance of professional implementation partners. Apart from agriculture, fisheries and livestock/dairy production groups, interest groups among the landless and youth will be promoted to earn incomes from provision of various inputs and output harvesting, processing, value addition and marketing. The incremental approach is aimed at leading to a critical mass of producers of niche products and marketable surpluses in each region, confederated into producer organizations, to enable them to enter 4P (public-private-producer partnerships) and contract farming agreements.

C. Project Components

The project consists of three complementary components that address the causes of vulnerability, poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fisherfolk and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.

- Transformation of Coastal and Rural Incomes: Coastal and rural communities organized and assisted to develop capacities for market oriented, climate resilient improved agriculture and fisheries production systems, and value addition and transition to higher value outputs/products, based on structured sustainable value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.
- Economic and Social Inclusion of Disadvantaged Groups: Job market and small business development, facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored business, technical and vocational service provision.
- Project Management and Policy Support: Establishment of an efficient project management structure: a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing in buffer zone, support for innovation, GEWE, youth inclusion, better nutrition and climate adaption.

D. Objective of Assignment

To mitigate fiduciary risks associated with project activities and to strengthen internal control processes, PMU requires services of an Internal Auditor to conduct periodic Internal Audit of PMU activities for BES Project, systems and transactions.

Purpose and Definition of Internal Audit. Internal Audit is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. Internal Audit helps an organization accomplish its objectives by bringing a systematic and disciplined approach to evaluate and improve effectiveness of risk management, control, and governance processes.

Purpose of hiring Internal Auditor is to help project accomplish its objectives by bringing a systematic and disciplined approach to evaluate and improve effectiveness of risk management, control, and governance processes. Project perceives that Internal Auditor shall:

- ✓ provide assurance that financial and operational risks are understood and appropriately managed;
- ✓ promote establishment of best practices;
- ✓ identify opportunities for pragmatic efficiency and effectiveness improvements, primarily in internal controls and risk analysis;
- ✓ advise on matters regarding internal controls and risk management;
- ✓ evaluate risk management procedures and internal controls;
- ✓ provide comprehensive process assurance services.

Professional Standards. Internal Auditor shall carry out its responsibilities in accordance with professional standards including those issued by Institute of Internal Auditors and International Federation of Accountants, internal auditor carrying out the assignment is expected to maintain highest standard of:

Integrity: Integrity of internal auditor exhibits highest level of professional objectivity in gathering, evaluating, and communicating information about activity or process being examined. Makes a balanced assessment of all relevant circumstances and is not unduly influenced by its own interests or by others in forming judgements.

Confidentiality: Internal auditor respects value and ownership of information received and do not disclose information without appropriate authority unless there is legal or professional obligation to do so.

Competence: Internal auditor applies knowledge, skills, and experience needed in performance of assignment.

Authority and Independence: Internal Auditor will have full, free and unrestricted access to project's records, physical properties, personnel and other entities relevant to an area under review. Internal Auditor will have no responsibility for or authority over any of activities or operations subject to its review. Internal Auditor shall not perform any operational duties, develop and install systems and procedures, initiate or approve accounting transactions, prepare records, or engage in any other activity which it would normally review and appraise and which could reasonably be construed to compromise in appearance or fact, independence and/or objectivity of Internal Auditor.

E. Scope of Work and Responsibilities:

Internal Auditor shall provide internal audit services to the project. Internal Audit of project will be carried out as per approved internal audit plan agreed between project management and firm

Scope of work of Internal Auditor is to determine whether project's risk management, controls, and compliance processes, as designed and represented by management, are adequate and functioning. Control frameworks are developed in compliance with GoS Rules and Regulations, IFAD's Guidelines as well as international standards such as Committee of Sponsoring Organizations model — COSO-ERM and ISACA's (Information Systems and Control Association) COBIT (Control Objectives for Information and related Technology).

Internal Auditor should review that whether projects' control framework ensures that:

- i. Risks are appropriately identified and managed.
- ii. Significant financial, managerial, and operating information is accurate, reliable and timely.
- iii. Employees' actions and transactions are in compliance with internal policies, standards, procedures, and external applicable laws and regulations.
- iv. Resources are acquired economically, used efficiently, and adequately protected.
- v. Programs, plans, and objectives are achieved.
- vi. Quality and continuous improvement are fostered in project's control process.
- vii. Significant legislative and regulatory issues impacting project are recognized and addressed appropriately.

Internal Auditor will carry out its responsibilities by:

- i. Developing an Internal Audit plan using an appropriate risk-based methodology, including any risks or control concerns identified by management, external auditor, or Project Steering Committee (PSC). Agreeing plan with project director and submitting to PSC for review and approval.
- ii. Executing Internal Audit plan, as approved and revised, from time to time.
- iii. Performing advisory services, beyond assurance services, to assist management in meeting project's objectives, where required. (Clarification: As an internal auditor, it is important to remain independent of management operations and project implementation activities. IA firm can certainly add value and provide advisory to improve controls design and overall internal controls environment that may assist management in meeting project's objectives).
- iv. Reporting suspected fraud, investigation of significant suspected fraudulent activities within the project, if any, and notify PSC of results.(Exclusion: As mentioned above, TORs requires reporting suspected frauds, investigation of significant suspected activities within the project, if any, and notify the PSC of the results. While performing internal audit procedures, where IA firm identify instances / indicators of possible fraudulent activities, red flags will be reported to concerned / appropriate level with details noted based on information available. However, investigation of any such fraudulent activity cannot be covered as part of current internal audit scope of work due to following reason:
 - a. It is not practically possible to assess the nature of fraud and extent of work required to investigate the same.
 - b. Fraud investigation require specific competency based on nature of fraud. This cannot be ascertained/ covered under current scope of work. If there are such services required, these can be provided under separate arrangement).
- v. Communicating results of Internal Audit and recommendations for improvement to Project Director. Obtaining written management responses as to corrective action planned or taken within a specified time from issuance of audit reports. Evaluate and monitor disposition of proposed actions and their expected effectiveness. Instances of residual risk that may be unacceptable will be discussed with management and, if unresolved, reported to PSC.
- vi. Physical verification of a sample of project assets, activities and outputs in districts where project is being implemented.
- vii. Issuing internal audit reports to Project Director as well as PSC.

- viii. Employing professional audit staff with sufficient knowledge, skills, experience, and professional certifications to carry out audit of project.
- ix. Communicating opportunities for improving management control, functioning and organization of project to management and PSC.

Control assurance activities performed Internal Auditor will include:

- ✓ Reviewing reliability and integrity of financial and operating information and how it is identified, measured, classified and reported.
- ✓ Reviewing systems established to ensure compliance with laws and regulations.
- ✓ Reviewing systems established to safeguard assets and, when appropriate, verifying existence of assets.
- ✓ Appraising economical and efficient use of resources.
- ✓ Evaluating adequacy and effectiveness of project's processes for controlling activities and managing risks.
- ✓ Testing key financial reporting controls in identified financial systems and processes.
- ✓ Identifying significant risks to ability of project to meet its objectives, communicating them to management and ensuring that management has taken appropriate action to guard against those risks.
- ✓ Performing early entry engagements to assist management in incorporating an adequate control structure in new systems and processes.
- ✓ Reviewing reports of external auditor, monitoring compliance against recommendations of auditors and reporting status to Additional Secretary (Development) and PCC.

Key consideration to the scope of work

Internal auditor will assess the controls from design / improvement perspective and perform test of controls as per International Standards of Internal Auditing prescribed by Institute of Internal Auditors, USA. A risk-based sampling methodology as prescribed by internal auditing standards issued by IIA shall be followed. However, current internal audit scope does not cover performing any financial audits (providing assurance on financial reports as per International Auditing Standards) or technical / performance audits or impact assessments.

1. The IA shall obtain and rely on the information made available to us by the concerned management officials of the project. For such data basic sanity and consistency checks may be applied to ensure its reasonability and a sample may be selected to verify some of the transactions, however, any intentional or unintentional errors/misreporting may not necessarily identified as a result.
2. The Internal audit will be performed based on a sample transaction basis, which may be selected on a judgmental and / or random basis depending on nature of process being audited. There would always be a sampling risk, that is sample selected may not be truly representative of population being tested. Hence all the issues may not be identified had entire population being tested.

3. Implementation of the recommendations of internal audit shall be the responsibility of project management. Internal auditor, on a periodic basis, shall perform a follow up audit and provide status of implementation to the management.
4. Internal auditor will not authorize, execute or consummate transactions or prepare any books of accounts or otherwise exercise any other authority on behalf of the project.
5. Internal auditor will not obtain / maintain custody of any assets.
6. Internal auditor will not act in any capacity equivalent to a member of management or an employee.
7. Internal auditor will not act as pre-auditor or pre-approver of the transactions or in any capacity equivalent to a member of management or an employee.
8. Client shall provide (or cause others to provide) to auditor, promptly, the information, resources and assistance (including access to records, systems, premises and people) that we reasonably require to perform the Services.
9. Timelines will be discussed for each internal audit execution and reporting at the time of internal audit planning and agreed/ defined in the internal audit plan. Timelines are subject to timely availability of the information/ meeting time by the project management.
10. Moreover, with respect to follow-up of the DG audit comments, internal auditor shall follow up on the points related to control weaknesses and process deficiencies relevant to our scope and period of audit. Any transaction level points or rectification required or any investigation related to it, will not be part of our follow up scope.

Project Activities / Processes where Internal Auditor should particularly focus include:

Control Environment. Control environment risk factors incorporate management's attitude, awareness, and actions concerning an organization's control environment, It is important that Internal Auditor obtain sufficient knowledge of PMU control environment to determine whether collective effect of these factors establishes, enhances, or mitigates effectiveness of specific control techniques. In making this determination, Internal Auditor should consider PMU managements' philosophy and operating style, managements' monitoring of performance and compliance with laws and regulations.

Financial Management .Internal Auditor shall perform a review of financial and internal control structure at PMU and report if they are in accordance with international standards to determine adequacy of existing controls related to management of all funds received by entities. Internal Auditor shall obtain sufficient understanding of entities' financial management system and provide evaluation of management control environment, accounting system and control procedures in order to determine adequacy of system to control and account for funds transferred to it.

Procurement Management. Internal Auditor shall review project's procurement processes with an objective to provide assurance that they are effectively designed in accordance with Bank's procurement guidelines and are operating efficiently. This will involve review of project's procurement policies and procedures for procurement planning, avoidance of improper business practices and conflicts of interest, competitive procurement, ordering procedures, invoice examination policies and procedures to ensure payments are made only for goods and services received.

Contract Management. Internal Auditor shall review project's processes for contract management and administration to provide assurance that all parties to contract fully meet their respective obligations as efficiently and effectively as possible, delivering business and operational outputs required from contract and providing value for money. Internal Auditor shall carry out a detailed review of contract administration functions such as inspection and acceptance, agreement modifications, disputes, proper

accounting and termination etc. Internal Auditor will also liaise with External Auditors including provision of internal audit reports, discussion on project risks and compliance with recommendations.

Quality Assurance. Internal Auditor shall develop and maintain a quality assurance and improvement program that covers all aspects of Internal Audit activity related to the project. This should enable evaluation of conformance of Internal Auditor activities with Institute of Internal Auditors International Professional Practices Framework (IPPF), Code of Ethics and best practices.

F. Reporting Arrangements

For administrative and contractual matters, Internal Auditor shall liaise with Project Director. Envisaged reporting arrangements for internal auditor are summarized below:

Project Director

- Contractual matters including payment for internal audit services.
- Discussion on level of risks, areas where management needs support and time allocations to prepare internal audit plan
- Preparation and submission of internal audit plan for project.
- Agreeing on dates and schedule for internal audit.
- Submission of draft internal audit report.
- Discussion on draft internal audit report.
- Submission of final internal audit report incorporating management comments.
- Reporting on follow-up of internal audit recommendations for project.
- Reporting on follow-up of external audit recommendations.

Project Steering Committee (PSC)

- Submission and approval of internal audit plan.
- Submission of internal audit reports.
- Attending meetings where internal audit reports are discussed.
- Follow-up on directives of PSC.
- Reporting on follow-up of internal audit recommendations.
- Reporting on follow-up of external audit recommendations.

G. Place of assignment

Place of assignment is Karachi, with field work as required.

H. Qualifications

Annexure-19: Financial Tables for the Supervision Missions

These financial tables are required for the supervision mission and they are placed as Appendix 2 to the Supervision Mission Report. IFAD has prescribed the format for these tables which is given hereunder for the guidance of the finance team.

Appendix 2: Financial: Actual financial performance by financier; by component and disbursements by category

Table 2A: Financial performance by financier

Financier	Appraisal (USD '000)	Disbursements (USD '000)	Per cent disbursed
IFAD loan			
IFAD grant			
Co-financier			
Government			
Total			

Table 2B: Financial performance by financier by component (USD '000)

Component	IFAD loan			IFAD grant			Co-financier			Government			Domestic 1			Total		
	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%

Table 2C: IFAD loan disbursements (SDR, as at [Insert date: dd-m-yy])

Category	Category description	Original Allocation	Revised Allocation	Disbursement	W/A pending	Balance	Per cent disbursed
I							
II							
III							
IV							
V							
	Initial deposit						
	Total						

Figure 1: IFAD loan/grant disbursement, comparisons between original and revised allocations and actual disbursement

Annexure-20: Format for measuring compliance with legal covenants

Supervision missions assess the extent to which a project has complied with applicable compliance requirements contained in the Financing Agreement, Letter to Borrower etc.

The following table is part of the Supervision Mission Report as Appendix 3

Appendix 3: Compliance with legal covenants: Status of implementation

Section	Covenant	Target/Action Due Date	Compliance Status/Date	Remarks
Section 4.02	PCU to open and maintain a Project Account (in ...); GO? to make an initial deposit equivalent to USD ??????			
Section 4.02	GO? to replenish Project Account quarterly in advance			
Section 4.03	Procurement of goods, works and services carried out in accordance with the procedures laid down in Schedule 3			
Section 4.04	Insurance of vehicles, equipment and civil works financed from the loan proceeds to be consistent with sound commercial practice.			
Section 4.05, section 11.10(b)	Audit report submitted to IFAD.			
Section 4.06	Progress reports to be submitted to IFAD on a quarterly basis.			
Schedule 4, para 7	AWPB to be submitted to the Fund, for its review and comments			
Schedule 4, para 8(a)	A Mid-Term Review (MTR) to be carried out jointly by the Borrower and IFAD.			
Schedule 4, para 16	Project to be exempted from all import duties, excise taxes and value added tax (VAT) on investment expenditures			

ANNEXURE 20-A

S.No	District	TEHSIL_NAME	UC_NAME	# of RVs	Estimated HHs	Projected HHs	NPGP Assets Transferred (Tangible +Intangible)
1	Badin	Badin	Abdullah Shah	4	2523	2687	
2	Badin	Badin	Behdami	9	2756	2936	
3	Badin	Badin	Bhugra Memon	11	2351	2504	
4	Badin	Badin	Chakar Khan Panhwar	4	2477	2638	
5	Badin	Badin	Haji Soomar Abro	7	3071	3271	399
6	Badin	Badin	Kadi Kazia	14	3065	3265	418
7	Badin	Badin	Kazia Wah	10	3036	3234	
8	Badin	Badin	Luawari Sharif	5	2731	2909	409
9	Badin	Badin	Mithi 3	4	2493	2655	
10	Badin	Badin	Mitho Khan Chandio	4	4572	4870	
11	Badin	Badin	Muhamamad Khan Bhugri	9	2739	2917	
12	Badin	Badin	Nindo Shaher	9	2986	3180	
13	Badin	Badin	Pir Fateh Shah Village	7	2569	2736	
14	Badin	Badin	Seerani	9	2773	2954	580
15	Badin	Badin	Shaheed Dodo Soomro @ Lakho pir	10	2848	3034	
16	Badin	Badin	Shaheed Rani Allah dino khan jamali	7	2538	2703	
17	Badin	Badin	Zainul Abdin Ilyas Jhandu Shah Dargah	8	3104	3306	
18	Badin	Shaheed Fazul Rahu	Dadharko	6	3161	3367	
19	Badin	Shaheed Fazul Rahu	Dargah Sharif Ahmed Rajo	11	3312	3528	
20	Badin	Shaheed Fazul Rahu	Dubi	9	2411	2568	360
21	Badin	Shaheed Fazul Rahu	Fateh Abad	7	2809	2992	

22	Badin	Shaheed Fazul Rahu	Gharo	6	2702	2878	253
23	Badin	Shaheed Fazul Rahu	Kario Ghanwar	4	1998	2128	
24	Badin	Shaheed Fazul Rahu	Khorwah	7	2235	2381	126
25	Badin	Shaheed Fazul Rahu	Khorwah Chowk	9	2525	2689	
26	Badin	Shaheed Fazul Rahu	Muhammad Shah Mureed Chang	8	3051	3250	
27	Badin	Shaheed Fazul Rahu	Rahuki	6	2473	2634	411
28	Badin	Shaheed Fazul Rahu	Shaheed Fazul Rahu	6	4874	5191	99
29	Badin	Shaheed Fazul Rahu	Tarai	7	3369	3588	268
30	Sujawal	Jati	Begna	9	2971	3201	634
31	Sujawal	Jati	Ghulamullah Otho	13	2801	3018	
32	Sujawal	Jati	Gul Muhammad Baran	15	3204	3452	394
33	Sujawal	Jati	Kar Malik	17	2986	3217	314
34	Sujawal	Jati	Kothi	15	3090	3329	671
35	Sujawal	Jati	Marho Bola Khan	12	3351	3610	
36	Sujawal	Jati	Mughal Bin	15	2300	2478	
37	Sujawal	Jati	Mureed Khoso	8	2393	2578	767
38	Sujawal	Jati	Shah Kapoor	13	3432	3698	
39	Sujawal	Shah Bunder	Chach Jehan Khan	11	3269	3522	
40	Sujawal	Shah Bunder	Chuhar Jamali	9	3941	4246	
41	Sujawal	Shah Bunder	Doulatpur	15	3006	3239	299
42	Sujawal	Shah Bunder	Goongani	8	3002	3234	584
43	Sujawal	Shah Bunder	Jango Jalbani	16	3447	3714	309
44	Sujawal	Shah Bunder	Ladiun	7	2450	2640	496
45	Sujawal	Shah Bunder	Shah Bunder	14	2357	2539	
46	Thatta	Ghora Bari	Guleel	5	3348	3693	
47	Thatta	Ghora Bari	Indo	6	1562	1723	
48	Thatta	Ghora Bari	Jara Dali	2	1084	1196	
49	Thatta	Ghora Bari	K A R Shah	6	2659	2933	
50	Thatta	Ghora Bari	Khann	3	1647	1817	13
51	Thatta	Ghora Bari	Mahar	11	5133	5663	
52	Thatta	Ghora Bari	Mohal	12	4647	5126	
53	Thatta	Ghora Bari	Udasi	10	4225	4661	

54	Thatta	Keti bunder	Beghaan	11	4813	5310	
55	Thatta	Keti bunder	Bet Mahyar	9	2668	2943	
56	Thatta	Keti bunder	Keti Bunder	11	2175	2399	
57	Thatta	Mriprur Sakro	Bhambor	7	5507	6075	
58	Thatta	Mriprur Sakro	Buhara	5	4235	4672	212
59	Thatta	Mriprur Sakro	Chobandi	9	2770	3056	713
60	Thatta	Mriprur Sakro	Dhabeji	1	2492	2749	
61	Thatta	Mriprur Sakro	Dubo	8	2878	3175	
62	Thatta	Mriprur Sakro	Ghaghi	8	3177	3505	1130
63	Thatta	Mriprur Sakro	Ghullamullah	6	2745	3028	493
64	Thatta	Mriprur Sakro	Gujjo	7	3928	4333	730
65	Thatta	Mriprur Sakro	Kaghan	7	3067	3383	
66	Thatta	Mriprur Sakro	Karampur	5	2097	2313	473
67	Thatta	Mriprur Sakro	Kukrand	9	2478	2734	950
68	Thatta	Mriprur Sakro	Palijani	5	2758	3043	
69	Thatta	Mriprur Sakro	Samki	8	2204	2431	
70	Thatta	Mriprur Sakro	Sukhpur	4	3855	4253	562
			Total	589	209,704	226,924	13,067

Annexure-21: Stakeholders Engagement Plan (SEP) & Grievance Redress Mechanism (GRM)

SINDH COASTAL RESILIENCE PROJECT
SOCIAL, ENVIRONMENTAL AND CLIMATE ASSESSMENT PROCEDURES (SECAP)

STAKEHOLDERS ENGAGEMENT PLAN (SEP)
&
GRIEVANCE REDRESS MECHANISM (GRM)

JANUARY 2024

INTRODUCTION

Project Rationale

169. Pakistan is the world's 5th most populous country with a population of 240 million inhabitants (2022 census) out of which 63 percent is rural. Sindh is the second most populous province in Pakistan with a population of 55.7 million. Sindh has a well-developed agricultural base supported by an extensive irrigation network on the Indus River. With its 350 km coastline, Sindh has 48 percent share in fish export from Pakistan. Agriculture contributes 24 percent to Sindh GDP and generates 70 percent of the employment. Livestock and fisheries contribute over 50 percent of the agriculture GDP of the province. The poor derive 56 percent of their income from agriculture.⁴¹ Livestock provides critical income security for many rural households and is of particular importance to women⁴². People lack clear land tenure rights and most of the poor smallholders depend on landowners and middlemen. In addition, the sector is facing alarming ecosystem degradation due to pollution, deforestation, and upstream massive water withdrawals in the Indus basin, leading, among others, to sea intrusion and salinisation. Climate change raises smallholder vulnerability, with episodes of heatwaves, floods, and cyclones in the arid context of Sindh coastal area.

170. Despite its resource endowments, Sindh is afflicted with large pockets of endemic poverty, particularly in rural areas. In Sindh, about 30-35 percent of the population lives below the poverty line. The prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively and exceed the national averages of 20 percent and 40 percent respectively⁴³.

171. IFAD will be financing the Sindh Coastal Resilience Project (SCRIP) in the three poorest districts with a population of 3.87 million/697,262 households or 7 percent of the provincial population. The three districts namely Thatta, Sujawal and Badin are recognized as the most deprived and under-developed with a multi-dimensional poverty headcount respectively of 86, 85, 82 percent⁴⁴. Of the landowners, 84 percent own less than 25 acres⁴⁵. A very small population of the three districts own land which is 2.2% households in Thatta, 0.4% in Sujawal and 4.3% in Badin⁴⁶. Small holdings, traditional low input low-output production systems, lack of access to technology, services and financial services, and small and scattered marketable surpluses keep performance of smallholder farming below potential. Coastal fishermen communities are the most deprived in terms of productive assets and social infrastructure/services. 76 percent rural households are landless and work as tenants/sharecroppers and working on land owned by a large landowner as tenants⁴⁷.

Project Development Objective and Project Components

172. The Project development objective is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and services; (ii) Increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilitates access to natural resources and support services.

⁴¹ Rana, W. (2019): Creating fiscal space for enhancing public investment in Sindh agriculture sector. PACE policy research paper.

⁴² World Bank (2022): *Pakistan Country Climate and Development Report*. Washington, DC.

⁴³ FAO, WFP, WHO, UNICEF (2020): *Pakistan Overview of Food Security and Nutrition*.

⁴⁴ Sindh Districts Profile, P&D Department, Sindh

⁴⁵ Pakistan Bureau of Statistics.

⁴⁶ Sindh Districts Profile 2021, P&D Department, Sindh.

⁴⁷ Profile of Land Tenure System in Pakistan, 2015. <https://piler.org.pk/wp-content/uploads/2017/02/KB-Report-corrected-compressed.pdf>

173. Project Components: SCRP will have an inclusive approach to transformation of economies and incomes in the target rural communities. The project consists of three complementary components that address the causes of poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.

174. Transformation of Coastal Rural Incomes: Rural communities organized and assisted to develop capacities for market oriented improved productivity and production and value addition and transition to higher value outputs/products based on structured value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.

175. Economic and social Inclusion of Disadvantaged Groups (job market and value chain participation facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored enterprise development and technical and vocational service provision).

176. Project Management and Policy Support: Establishment of an efficient project management structure (a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing in buffer zone etc.).

Purpose of the SEP

177. The purpose of this Stakeholder Engagement Plan (SEP) is to prepare a strategy and a plan for consultation with the Project stakeholders, obtain their perception and feedback on project interventions, proposed mitigation and adaptation measures to address the potential project risks, and their views and recommendation on the Project interventions. SEP is also a lever to ensure the project meet the needs of the population and involves them fully.

OBJECTIVE OF SEP

178. The SEP is aimed at consulting about Project information concerning objectives, interventions, outcomes and impacts on the target communities including climate change and environmental impacts and obtain their feedback on the overall implementation and mitigation plan for the project. The consultation process will provide the stakeholders with an opportunity to inform and influence decision-making on the project interventions including effective grievance redress procedures. Stakeholders' engagement will ensure transparency in project activities and create a sense of ownership among all concerned.

STAKEHOLDER IDENTIFICATION AND ANALYSIS

Affected Parties

179. SCRP will involve and affect many people. Small holder farmers, fisherfolk and landless poor of Thatta, Sujawal and Badin districts will be affected and engaged directly under different interventions including value chains, infrastructure, financial services, extension and skill development services provision.

180. These smallholders will be reached via Villages Organizations. The village development roadmaps to be prepared for the development needs of the concerned villages, will identify various interest groups based on their material and natural endowments, development potential, orientation and preference. These groups will be identified and formed during project implementation, examples include: farmers through crops production interest groups; women and farmers through livestock interest groups; fisherfolks interest groups (leading possibly to aquaculture); traditional crafts production/marketing interest groups, etc.

181. Each interest group will range from 30 to 40 members and each Revenue Village will, on average, have around 10/12 interest groups. Women and youth representation and participation in VO management and subgroups will be ensured. Mixed interest groups of men and women will be established as much as possible when socio-cultural norms allow. In other cases, Women only interest groups will be promoted especially in dairy, small ruminants, processing and value addition and traditional crops. In addition, Youth groups (combining young women and men) will also be set up to ensure that youth can meet, discuss their situation, and challenge, and build up strategies to better link with established adult groups and stakeholders, as well as to develop their own capacities and vision. It could be very promising to mobilize young people for village assessments and analysis under the supervision/guidance of support organizations to provide methodologies and ensure a strong empowerment.

182. All these subgroups must consider the mainstreaming themes (Climate, Ecosystems, Nutrition, GEWE and Youth Inclusion) in their collective and/or individual business plan: how each group integrated each theme as a source of opportunity and strength?

Other Interested Parties

183. The current and usual socio-economic partners of smallholders are landowners, middle-men and inputs suppliers. The purpose of the project is to enable smallholders to become more independent from the latter (longer-term land agreement; better access to formal financial services, better access to good quality inputs). Thus, while landowners, middle-men and input suppliers are not the targeted beneficiaries of the project, obviously, they will be impacted by the project and may slow-down the results. This is the reason why it is recommended for SCRP to develop contacts with landlords, middle-men and input suppliers, explain the objectives of the project, and explore the long-term interests they may have with enhanced smallholder livelihoods, and climate smart agriculture. Under any circumstances these stakeholders should directly benefit from the project, but they shouldn't adversely affect the impacts of the project.

184. The provincial government departments at the province and district level including Planning and Development, Agriculture Extension and Research, Fisheries, Coastal Development and Local Government will be involved in the Project implementation. Other non-government implementing partners like rural support organizations (RSOs) and NGOs will also be involved.

185. Both public services and NGOs should be trained as part of project implementation to better play their role in supporting smallholders and poor households. IFAD and ADB as financing agencies have an essential role to play. PMUs and implementing partners from other projects in Sindh will be, depending on the aim, approach and geographical implementation, involved to foster cooperation, capacity development and more integrated support.

186. At the provincial level, GoS will receive policy support in view to set up an enabling environment pro-poor households and smallholders.

Disadvantaged Groups

187. SCRP has identified disadvantaged groups including landless, women from BISP beneficiary families, and male and female youth from households with poverty score 0-32.

Analysis of Stakeholders

188. Majority of the target districts' population involved in agriculture is either smallholder or has no land and is dependent on landlords and middle-men. Similarly, most fishing communities work on others' boats as labourers and helpers with limited or no economic space for themselves. They are mostly indebted to the landlords, boat owners and middlemen which is almost an endless process continuing for decades. Because of this situation, they are highly vulnerable to climate change impacts and recurring natural disasters like floods, high tides, sea level rise and cyclones coupled with ecosystem degradation. Sea intrusion, degraded soils due to salinity, saline groundwater, shortage of water for irrigation due to excessive withdrawals upstream during peak

periods further add to their perils. SCRП will help build their resilience to cope with these disasters and support them in developing and improving their economic wellbeing.

189. This diverse group represents SCRП stakeholders ranging from directly affected and benefited people to many indirectly benefiting communities. Those who are at the receiving end are those with a small source of income like smallholders and fisherfolk while there are others who have no regular source of livelihood except seasonal or occasional daily wages. Poor women and youth with meagre livelihoods and no or poor skills are making a good part of the target beneficiaries. The mobilization and development of these communities to effective and efficient village organizations (VO) will be a key to achieving the objective of the Project. A diligent needs assessment and implementation of the proposed village development plans will depend upon proper mobilization and capacity building of the VOs.

190. The expected interest groups will have varied interests according to their choice of business like agri inputs supplies, dairy, fish, grading, marketing, processing and packing, etc. However, they will need to be supported in proper orientation and inclusive and participatory business plans development leading to improved agency and empowerment.

191. The more important group of implementing departments from the provincial government like Planning and Development (Project Management Unit) , Agriculture, Fisheries and Coastal Development Departments village organizations (VOs), RSOs and NGOs as Social Mobilization Partners (SMP) , make another group of stakeholders whose role will be crucial to the success of the Project. Capacity and previous experience of implementing partners in similar activities of climate sensitive interventions is crucial to the Project. In particular, PMU and DCUs will have to consider the assets and skills provided by recent or ongoing projects in Sindh and in the three targeted districts. For examples, the GCF funded project “Transforming the Indus Basin with Climate Resilient Agriculture and Water Management” (2020-2026) has supported, in the district of Badin (as well as Umer Kot and Sanghar districts in Sindh), agrometeorological service providers as well as extensionists with Climate Smart Agriculture skills. The supported farmers might also be very key to support and strengthen the other communities.

Summary of Project Stakeholder Needs

192. The following lines describe the expected needs of the stakeholders which may be refined when the project will start being implemented after meeting with them.

193. Foremost are the government departments including PMU and others to be well versed with the project objective and proposed interventions. The Agriculture and Fisheries Departments should have the knowledge and experience of climate smart agriculture, salinity management and fisheries management as affected by climate change. The introduction and adaptation of available best practices, techniques and locally suited technologies in agriculture and fisheries will be essential to achieve the goal of the project.

194. Agriculture Department is already working with FAO in climate smart agriculture (in Badin district) and should be able to ensure all the three districts have the required knowledge for such interventions, however, the Fisheries department needs, for additional skills and know-how, will have to be identified. As importantly, public services will be supported to adopt both, a system approach (so that technical advice can be provided given the constraints and potentials smallholders are facing from various perspectives), and a participatory approach (built on the practices, knowledge, objectives of smallholders). The services they will provide throughout the project should lead to the empowerment of local communities from a technical, a social and an economical point of view.

195. SCRП will be implemented through SMPs to be hired through a competitive process. One of the requirements for them would be their experience and capacity for delivering such services to the government officials as well as VOs and other interest groups. Consultants and other service providers, as required from time to time, will also have the required knowledge and experience as per needs of the project.

196. SCRП seeks to develop the resilience of poor and vulnerable smallholders. In addition to technical and economical skills, smallholders will have to be empowered through the project, encouraging self-confidence and agency. To do so, members of Village Organizations and Subgroups (see 3.2 above) will be provided with basic

and sufficient economic, social, climate and environmental information related to Sindh context and trends and their links with food system and nutrition (see as an example the development for information on climate in paragraph .(below .26

197. For the same reasons, exchanges among villages, and a few visits of communities with success stories outside the three districts might be organized. Meetings among subgroups, between male, female and youth subgroups will be encouraged at village level to foster cooperation and inclusion. Bargaining capacities should also be skilled for subgroups to negotiate with their economic partners (suppliers of inputs and services, collectors, landowners). Skill provision in governance mechanisms will help to ensure smooth running of Village Organizations and interest subgroups. In addition, functional literacy might be also needed particularly for group leaders.

198. Strengthening technical and business capacities of various Villages Organisations and subgroups will be key, as part of Components 1 and 2. This involves taking existing skills into consideration, fostering peer exchanges, setting up training courses using the Farmer Field School approach and strengthening technical decision-making capacity. Depending on subgroups and their business and adaptation plan, focuses might be provided on Climate Smart Agriculture (salinity and water management practices, drought resistant varieties of crops, short duration crops, manure and compost, introduction of land levelling, practices like zero tillage, mulching, bed and furrow irrigation and sowing in lines using drills, agrometeorological information, post-harvest and food loss reduction methods), on fishery and aquaculture (marine meteorology, fisheries management, fish feed, aquaculture and reducing post-harvest losses), on livestock (animal feed, animal health), on food processing (food storage conditions, food transformation techniques, food transport), on kitchen garden production, on rural business development. Furthermore, depending on the villages' job needs assessment, technical skills will be provided by STEVTA (smartphone maintenance, solar panel installation and maintenance, vehicle and engine maintenance, for employable skills and self-employment business activities.

199. As much as possible and relevant, exchanges and links among groups, for technical solutions and partnerships will be encouraged (e.g., leading to increased manure recovery for crop production, or to mix rice production with shrimp product for example, or introducing fodder production in tidal zones).

200. In addition, those groups will be supported to strengthen their positioning and obtain more adapted services from suppliers (supply of inputs and services such as finance and agrometeorological information, extension services) as well as from markets and food collectors. Special focuses will be provided on land tenure for smallholders to understand land agreements. To do so, support organizations will be essential and must adopt a participatory approach enabling smallholders and villages groups to more empowerment.

201. Overall, the target communities need to be sensitized about climate change and its impacts. Generally, there is an understanding about the change in weather like change in rainfall pattern and intensity, occurrence of floods, droughts and cyclones but awareness about the possible climate trends, their expected long term impacts, the connections between climate vulnerability, healthy/degraded ecosystems and agricultural productions will be very key, in order, for farmers, social groups and households, to prevent and mitigated these climate impacts in adopting adaptation options and coping with disaster risks.

202. There will always be a need for financial support to the target communities and groups. SCRIP has included the process and mechanisms for introducing financial facilities to farmers and fishermen to invest and adopt the technologies to overcome the climate related losses.

STAKEHOLDER ENGAGEMENT PROGRAM

Purpose and Timing of Stakeholder Engagement Program

203. The purpose of stakeholders' engagement is to take them on board about the whole process of project development and implementation, its objectives, proposed interventions, implementation methodology and process, its benefits and risks etc. As discussed above, the stakeholders have already been identified. IFAD and the relevant departments of the government of Sindh (Planning and Development, Agriculture [extension, research, water management], Fisheries, Coastal Development) are already on board since the concept stage.

Frequent consultation meetings have been held with them in Karachi and Badin by the IFAD SCRDP Design Mission in June 2023 and Design Mission in November 2023 for discussing the approach and methodology, target groups, interventions and implementation mechanism. The Concept Note was shared with Government of Sindh for its feedback while the Project Design Report will also be shared with them when ready.

204. With the start of implementation, IFAD will engage with the concerned PMU and other government departments' staff at the Secretariat and concerned Districts level in a start-up workshop to apprise them about their roles, build their capacity on the implementation strategy, selection and involvement of the target communities and groups including youth and women. To mark the occasion, a public session will be held with the strategic partners and representatives of the beneficiaries to present the project and gather comments and proposals concerning its implementation. Some key questions about implementation and the conditions for success will guide the discussion and ensure involvement of parties. For examples the selection criteria, formation of village organization and umbrella development plan of VOs will be discussed.

205. At early implementation, umbrella plans will be designed with VOs, as part of a participatory approach. They will identify priority community and value chain infrastructure deficits that need to be addressed. Identification of interest groups around certain value chains, development of business plans, capacity building needs and required technical assistance will be explained.

206. Social Mobilization Partners to be hired as implementing partners will be deeply involved in the project at all levels. They will have a key role in implementing the project to the satisfaction of client and beneficiaries for minimizing the chances of complaints. Some RSPs are involved in IFAD's NPGP project and other projects in the target and neighbouring districts working with the communities. They have been very helpful in facilitating IFAD's Concept and Design Mission field visits to the concerned communities in all the three districts of Thatta, Sujawal and Badin. FAO is implementing a GCF project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management - TIBCRAWM" in Badin and IFAD Design had quite elaborate discussion and consultation with it during the Design Mission in November 2023.

207. After selection, PMU will hold detailed sessions with the implementing partners on the objectives, approach and methodology, target groups selection, development of umbrella village plans and infrastructure needs. Their expected role in project implementation under different components and activities will also be thoroughly discussed. Details about identification and selection of value chains, assisting the farmers and fisherfolk to achieve true production potential of their existing economic activity and get fair market return through access to improved inputs (including nutrient-rich varieties and self-produced inputs such as compost or biopesticides), production technology, climate change adaptation, affordable credit services, training, extension services, aggregation/grading and competitive markets will be explained. Engagement with the target groups, setting targets and development of work plans and implementation mechanisms will be discussed.

208. Some of the target communities have been visited with the purpose of assessing their current livelihoods situation and needs and discussing the expected SCRDP project. They included agriculture and fishing communities, existing cooperatives and businessmen.

209. However, further consultation is required concerning climate change adaptation and the measures for mitigating its impact in the agriculture and fisheries sector to be prioritized and implemented. Applying the targeted adaptation assessment methodology, the government departments, RSOs, and VOs will be consulted about possible adaptation measures also contributing to reducing exposure and sensitivity to climate hazards. A set of techniques and approaches derived from Climate Smart Agriculture, Agroecology, Marine Ecology and Aquaculture, and food processing will be assessed and prioritized for their implementation through the project toward smallholders.

210. The Project will deploy a comprehensive communication campaign at the start involving radio and televisual media, as well as electronic and print media to inform the potential beneficiaries about project approach, interventions, eligibility and roles and responsibilities. This will be further backed by PMU, Agriculture, Livestock and Fisheries Extension staff to inform the target cohort. This will be followed by IPs and Extension staff visits to target villages to organize the willing villages into partner VOs, as per the well-established process in

prevailing social mobilization approach. Overall PMU district offices, agriculture extension, livestock and fisheries departments together with the implementing partners will be responsible for engagement and consultation with the VOs, interest groups about SCRP interventions and their role in selection and implementation of schemes and activities.

211. Introductory and consultative meetings have already been held with the following stakeholders during the Design Mission to discuss the above and the selected adaptation measures.

- Planning and development department
- Agriculture department (Extension and Research, On Farm Water Management)
- Livestock and Fisheries Department
- Forest and Wildlife Department
- Irrigation and Drainage Department
- Coastal Development Authority
- Food and Agriculture Organization
- National Rural Support Program
- Sindh Rural Support Organization
- WWF

Support to VOs will start with a village wide consultative and participatory diagnostic of livelihood sources of various income groups, opportunities and constraints in raising incomes, women and youth situation and opportunities, favourable entry points, potential leaders and opinion-makers, socio-economic infrastructure endowments and deficits and then build on this information a holistic plan for formation of various interest groups and their livelihood support plans

Strategy for Information Disclosure

212. As discussed above, information was shared with the concerned stakeholders during the meeting for their information and feedback to IFAD. After SCRP approval by IFAD and Sindh government, the information including PDR, SECAP and GRM will be available to all from the PMU office, Project website and IFAD website. Similarly, anyone can request for required information from the Project office. SCRP will be presented to each target village at the start of the support phase.

Review of Comments

213. The observations and comments offered during the design was recorded and thoroughly reviewed by IFAD team and be addressed in the report as long as possible. Otherwise, sufficient justification will be provided for no or partial consideration.

RESOURCES AND RESPONSIBILITIES FOR IMPLEMENTING STAKEHOLDER ENGAGEMENT ACTIVITIES

Resources

214. SCRP will provide the required human and financial resources through PMU. Training needs assessment, planning, identification and hiring of experts or firms will be the responsibility of PMU. Some of the training courses under agroecology, CSA, salinity management, marine ecology, value chains identification and business plans preparation may be outsourced by PMU or through SMPs. Lessons learned and knowledge gained from FAO/GCF project "TIBCRAWM" will also be handy assets to be used by SCRP. The selection of RSOs and other partners will be based on prior experience in social mobilization, climate resilient infrastructure, CSA and fisheries management.

Management Functions and Responsibilities

215. As discussed before, PMU is the overall entity for the management and implementation of all activities. It will also have district level units in each of the three selected districts to manage the related activities. However, SMPs will be assisting and facilitating the implementation of adaptation measures directly or indirectly through expert consultants.

GRIEVANCE REDRESS MECHANISM

Objectives of the Project GRMs

216. The objective of the project GRM is to provide project stakeholders with accessible and inclusive means to raise issues, concerns and grievances and allow the project leadership structures to respond and act upon them in a timely, effective and transparent manner that promotes a good direct and indirect stakeholder relationship and a harmonious atmosphere.

217. The GRM will be a system by which queries or clarifications about the programme will be responded to, problems with implementation will be resolved, and complaints and grievances will be addressed efficiently and effectively. The purpose of the grievance redress mechanism is:

- 218. To be responsive to the needs of beneficiaries and to address and resolve their grievances;
- 219. To serve as a conduit for soliciting inquiries, inviting suggestions, and increasing community participation;
- 220. To collect information that can be used to improve operational performance;
- 221. To enhance the programme's legitimacy among stakeholders;
- 222. To promote transparency and accountability;
- 223. To deter fraud and corruption and mitigate programme risks.

Principles of the Project GRMs

224. The GRM is based on the following six guiding principles:

1. Responsiveness and Confidentiality

225. The GRM will entertain all types of complaints, comments and suggestions, with a view to protect beneficiaries from any risks related to the project implementation and improve the project's efficacy and efficiency. Comments and suggestions received will be given due consideration and the providers will be kept informed of the response to their inputs. In order to ensure transparency in handling and processing of grievances, all project stakeholders, especially complainants will be kept informed of the handling process and the outcome of the redress process in timely manner. As confidentiality is an integral part of fairness, the identity and personal details of complainants will only be disclosed to those involved in the resolution of the grievance.

11. Objectivity and Independence

226. The mechanism empowers the Grievance Redress Cell to operate independently and objectively while handling grievances and to ensure that 1.all information, stakeholders and records required for inquiry and analysis are easily accessible. To avoid any conflicts of interest the selection of Complaint Handling Officers will be made from the project / consultant staff / community members, identified at different tiers of the project structure and community groups.

12. Simplicity

227. Simple procedures will be adopted for logging complaint and/or submitting suggestions or comments (described below), to ensure the GRM is accessible and understandable to all project stakeholders especially marginal groups, poor farmers and female beneficiaries.

13. Fairness

228. The GRM will equally consider all complaints irrespective of their nature, size and complexity. All complaints, comments and suggestions received will be registered and the person or entity making the request for Redress will be acknowledged in writing. The project staff implementing the GRM will be specially trained for grievance handling and resolution.

14. Timeliness

229. All grievances, irrespective of their nature and size shall be considered and corrective actions taken within 25 working days. All possible efforts will be made to complete the process within the shortest possible time.

15. Participation

230. The GRM encourages any stakeholders to lodge complaints, make suggestions, including for improvement of the GRM. The GRM will ensure that project beneficiaries are included in the process of redressing grievances and incorporating suggestions where required. Matters concerning Environmental and Social Management and Involuntary Resettlement will be an integral part of the process.

Eligibility and Validity of a Complaint

231. A complaint is considered valid and will be processed by the GRM whenever:

- It relates to an on-going SCRP financed activity;
- It is filed by project affected individuals and/or communities, or their representative, who believe that they are or may be directly and adversely affected by the project.
- The complainant is not a direct affected beneficiary of the project, but the subject of the complaint affects him/her or their community;
- Complaints with inadequate details will not be rejected for lack of information; the project will seek additional information from the Complainant/s and then take a decision on eligibility.

Exclusions

232. The following types of complaints shall not be taken up for consideration:

- Anonymous complaints;
- Frivolous issues that are not related to the Project;
- Cases involving decisions/policy matters in which the complainant has not been affected directly/indirectly;
- Cases where quasi-judicial procedures are prescribed for deciding matters or cases that are sub judice;
- A grievance which has already been disposed of by the GRM unless new evidence is submitted; and
- Complaints about corruption which should be lodged and dealt with separately from this system.

Grievance Redress Process

233. The process will involve the following procedure and mechanism.

Grievance Registration Procedure

234. A GRM should be located as close to the people as possible to be accessible to the affected persons (APs) including vulnerable groups. Project stakeholders and APs will be able to use a variety of channels to access GRM. It is important to identify and make provisions for different means of entry into the grievance redress process, as it helps to increase the access of APs to the GRM. Multiple channels can be used for presenting complaints. A grievance or a complaint can be registered in four ways; (1) Direct hard copy to the concerned office, (2) project website, (3) sending SMS or WhatsApp messages and (4) email. All the four facilities will be available after project offices are established, staff recruited and designated and communication channels are established. SMPs offices in the concerned districts will also receive complaints directly from the communities or through above mentioned ways. The Project will develop a standardized Form for complaints/comments to be available in the offices and on website. The required addresses, cell numbers and emails will be publicised in the project area and displayed in the concerned offices. The GRM procedure, focal persons for receiving and responding to the grievance, timelines for redressal and guarantee of confidentiality will also be shared.

235. The receipt of complaints is key and hence a simple and understandable procedure is adopted for receiving grievances, suggestions and comments relating to the project. The complainant may submit, containing his/her personal information, suggestions and/or comments on a simple paper, to the (i) PMU office in Karachi, (ii) DCU/SMP office in Thatta, (ii) DCU/SMP office in Sujawal, (iii) DCU/SMP office in Badin. Usually, the concerned office should have a Focal Person for receiving and registering a complaint/suggestion/comment or the Aggrieved Person/Complainant can drop his/her written complaint, suggestion/comments in a Box placed at a visible location for the purpose in the office. Complainants will be encouraged to use the standard format that will be available at every office/outlet mentioned above.

236. The Project will ensure that any person either in his personal capacity or representing a group of complainants and/or entities that files a grievance will be made aware of the grievance mechanism. The Project will facilitate tracking, evaluation and response to grievances.

237. A project GRM awareness campaign will be launched in print and electronic media. This will include distribution of brochures (in local languages), signboards in the vicinities where project interventions will be executed and in print media. The contents of these hoardings may include but not limited to the following:

238. All grievances, suggestions/comments etc. will be recorded in a Grievance Register by the Focal Person(s) / Complaint Handling Officer within two (2) working days of the receiving of the grievances. A unique number will be assigned to each grievance, suggestions and comment. In addition to lodging a grievance/suggestion/comment in the Grievance Register, the same shall also be uploaded in a dedicated database to be maintained at Project Web Portal, which can only be accessed by Project Director or any of his assigned representatives.

239. The Focal Person will formally acknowledge the receipt of grievance within five working days of the submission of grievance and will inform the complainant that the Project will respond within 20 working days. It will be ensured that all such acknowledgements, verbal or written are recorded in an appropriate manner to ensure a record of correspondence. Acknowledgments should include a summary of the grievance and an estimated time for response/resolution.

Grievance Redress Mechanism

240. The mechanism involves a hierarchical order starting from the field or district level Grievance Redress Sub-committee (GR Sub-committee) to the PMU level Grievance Redress Committee (GRC) to the Steering Committee (PSC) as shown in Figure 2. Usually, complaints and grievances should be resolved to the satisfaction of the complainant/aggrieved person at the concerned DCU Sub-committee level otherwise, it will be referred to the GRC which should decide and resolve the issue. The complainant can appeal to the Steering Committee through GRC if he/she is not satisfied with the decision of GRC.

Roles and Responsibilities of Grievance Redress Committees

Project Steering Committee

241. The Project Steering Committee (PSC) will act as the Apex Forum to hear and adjudicate on appeals against GRM decisions. Pending cases shall be presented by the Chairperson of GRC to the Project's Steering Committee. The PSC will review and resolve any appeals against the Grievance Redress Committee. Appeals must be lodged with the GRC for submission and reporting to the PSC.

Grievance Redress Committee

242. The Grievance Redress Committee (GRC), constituted at PMU Level and chaired by Project Director, will have the following mandate:

- Resolving and addressing complaints not resolved at GR Sub-Committee
- Reviewing appeals lodged against the resolutions of GR Sub-Committees
- Considering and determining corrective measures in the light of comments and suggestions received by GRC and/or recommended by GR Sub-Committees
- Monitoring GRM handling by GR Sub-Committees and reviewing resolutions suggested to them.
- Notifying members of GR Sub-Committees
- Analyzing data on grievances and using this to make informed decisions
- Reporting to PSC unresolved grievances at GSC level

243. The GRC will be the highest forum within the project for redressing the grievances received from the beneficiaries, stakeholders and other concerned. The committee, while handling a complaint may requisition any staff for its assistance and/or may constitute a special committee if required.

Grievance Redress Sub-Committees (DCU level)

244. The GR Sub-committees will be established at the three DCUs (Thatta, Sujawal and Badin). These Sub-Committees will be responsible for redressing complaints, grievances and suggestions in their respective areas and will forward unresolved complaints and unattended suggestions / comments to the GRC. A Focal Person in each DCU office will be responsible for collecting, registering and handling complaints, suggestions and comments that are submitted.

Verification of Complaint/Investigation/Redress

245. Once a complaint and/or suggestion / comment has been forwarded to the GRC or Sub-Committees, the Chairperson of the Committee will nominate a committee member to verify the issue and/or analyze the suggestion / comment prior to a thorough investigation, and to prepare a working paper for consideration of the Committee / Sub-Committee in its meeting. The investigations will include collecting and reviewing relevant documents, making site visits, consulting appropriate internal staff, contacting external stakeholders, interviewing the complainant as appropriate.

246. The Committee and Sub-Committee will meet as often as required to handle complaints and suggestions. The GRC and its Sub-Committee will ensure attendance of complainants at meetings as observers to ensure transparency. The GR Sub-Committees, in case of complaints pertaining to social and tribal issues / conflict, may redirect complaints for redress through the local elders if required, or they may invite such elders to their meetings for facilitation and assistance.

Right of Appeal

247. If a complainant is dissatisfied with and/or unwilling to accept the resolution of the GRC or its Sub-Committees, he/she may approach the appellate forum for review. The appeal committees will review the case and determine if further action is possible. Once all options for corrective actions have been explored and no further action is deemed appropriate, a written notice will be sent to the complainant advising that his/her grievance case is closed. In cases where appellate forum is PSC the complainant will be asked in writing to submit a written appeal along with the reasons for not accepting the resolution of GRC, for submission to PSC for issuing a final decision into the matter.

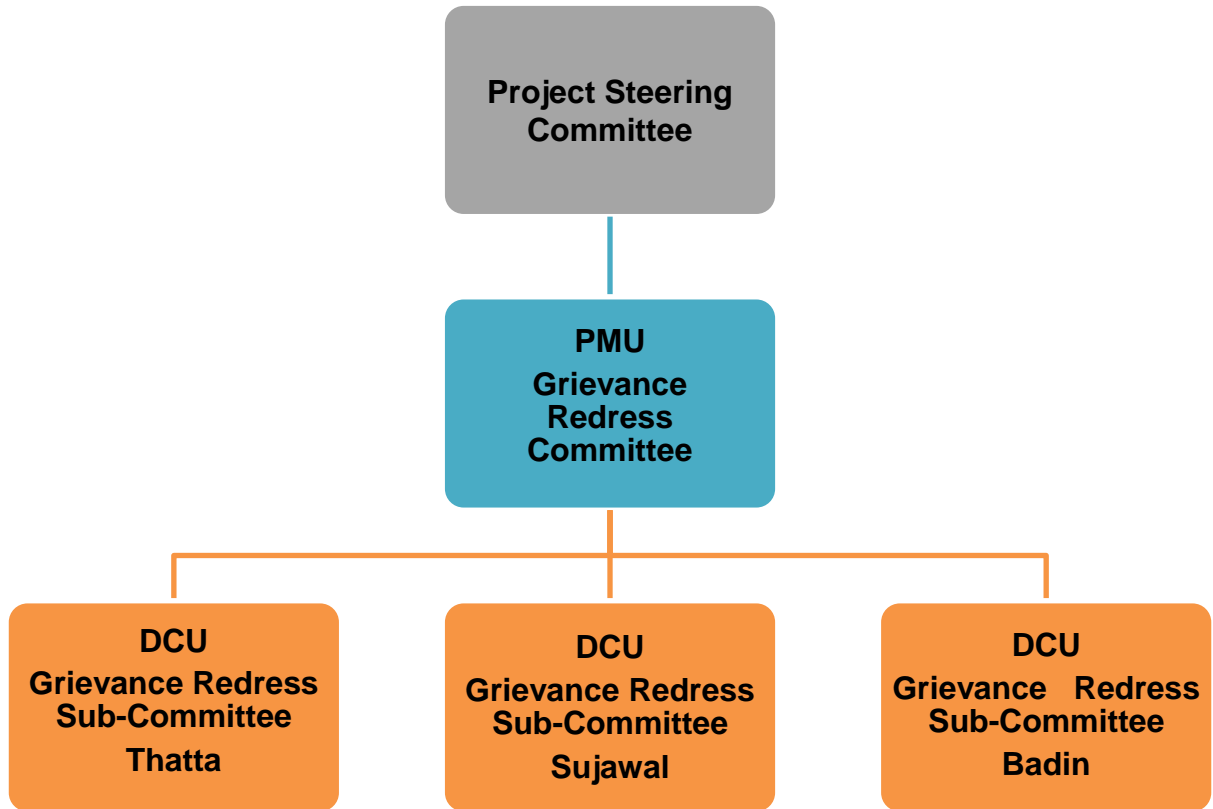


Figure 1. GRM redress mechanism.

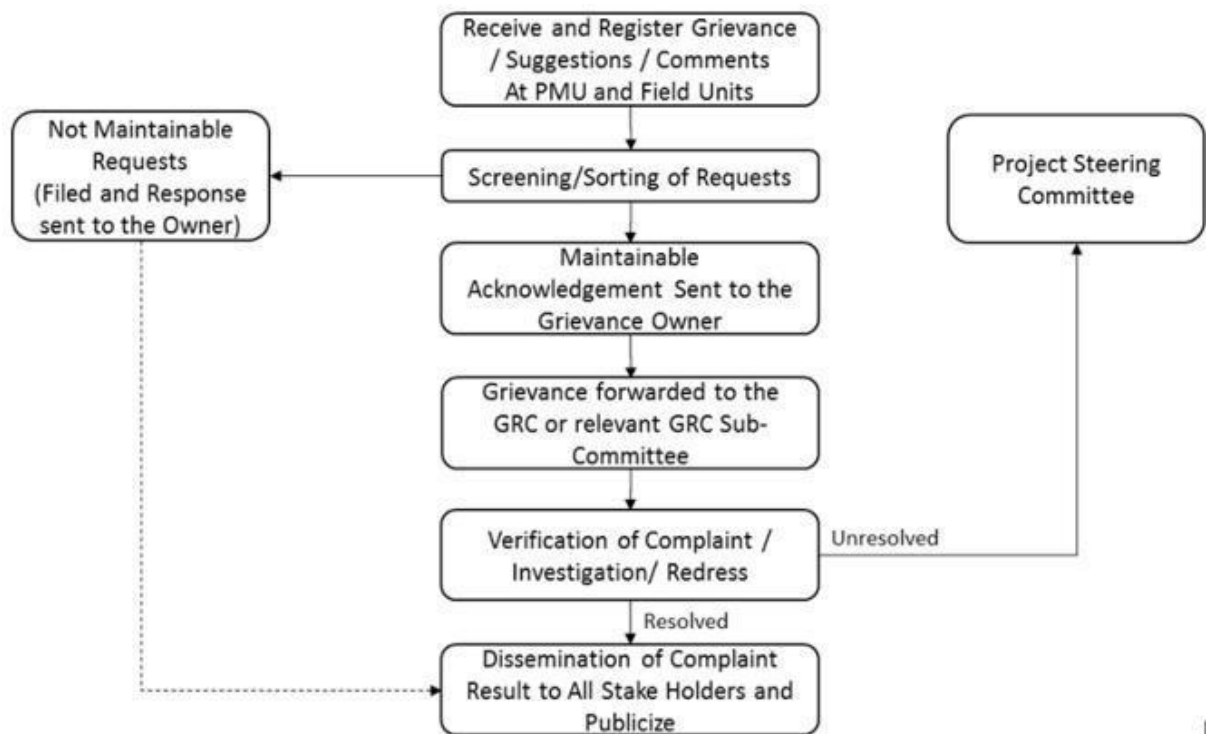


Figure 2. GRM process from complaint registration to final resolution of complaint.

MONITORING AND REPORTING

Involvement of Stakeholders in Monitoring Activities

248. As discussed above, the stakeholders will be involved throughout the process from verification of the complaint/grievance to the resolution and conclusion of it. In case they are not satisfied, the right of appeal has been provided at GR Sub-Committee and GR levels. Also, community elders may be involved during the proceedings for transparency purposes.

Reporting Back to Stakeholders and Feedback

249. Once the redress process is completed and the GRC and/or GR Sub-Committee has reached a conclusion, the result will be communicated to the complainant and concerned stakeholders. The results of the redress process will be uploaded to the project website. Besides communicating the results to the Complainant, the Focal Person(s) / Complaint Handling Officer will also record the information pertaining to the decisions of the Committee(s) in the grievance register and corresponding grievance database. The actions suggested by the GRC or Sub-Committee will be communicated to the concerned person(s) and will be recorded in a register.

250. The complainants will be informed of the proposed resolution in writing, and if need be, the same can be explained over telephone or in person to his/her satisfaction. If the complainant is not satisfied with the resolution, he or she will be informed of further options, which would include pursuing remedies through avenues afforded by the Pakistan's legal system.

251. The written response will clearly outline the course of action the project has undertaken to redress the grievances and the specific terminal date by which the recommended remedies shall be completed. Potential actions will include responding to a query or comment, providing users with a status update, referring the grievance to another level of the system for further action. The project will take action on every grievance. The Affected Person shall provide a written response agreeing or disagreeing with the proposed course of action within two weeks period after receiving the recommended actions.

Regular Review of GRM Process

252. GRC will conduct quarterly and annual review of the GRM process to ensure that all registered complaints and grievances have been resolved and actions taken. It will also check for compliance with the process, any gaps and improve the process. The following Table shows the objectives and monitoring indicators of the quarterly and annual reviews.

Period	Objectives	Indicators
<p>Quarterly review of quantitative indicators</p>	<p>To assess if grievances are correctly screened and classified</p> <p>To assess if suggestions / comments are properly identified and classified</p> <p>Identify trends in Grievances</p> <ul style="list-style-type: none"> · To ensure grievances are being addressed 	<p>§ Number and type of grievances received</p> <p>§ Number of grievances redressed by GRC and the three Sub-Committees.</p> <p>§ Repeat of grievances from same stakeholders</p> <p>§ Repeat of grievances from several stakeholders</p> <p>§ Timeframe for closure of grievances</p> <p>§ Number of comments accepted and corresponding actions taken</p> <p>§ Number of suggestions received and accepted</p>
<p>Annual review of grievance redress process</p>	<p>To assess the compliance with the GRM</p> <p>To evaluate progress with achieving results</p> <ul style="list-style-type: none"> · To identify improvements and update grievance handling and redressing procedures 	<p>§ Compliance with the GR process</p> <p>§ Completeness of grievance log and register</p> <p>§ Number of grievances received by type</p> <p>§ Number of grievances resolved</p> <p>§ Number of appeals received</p> <p>§ Number of appeals resolved</p> <p>§ Qualitative assessment of stakeholder awareness of grievances mechanism.</p> <p>§ Number of suggestions/ comments accepted</p>

6.

BUDGET

A sufficient budget should be dedicated to the GRM as part of the Project implementation cost.

Annexure-22: Targeted Adaptation Assessment

1. Sindh Coastal Resilience Project

a) Overview and Background of the project

1. The Sindh Coastal Resilience Project (SCRP) is a co-financed project by ADB and IFAD (parallel-financing modality) which will be implemented in three poorest districts of Sindh province, namely Sujawal, Thatta and Badin for an overall budget of USD 263 m for a 7-year period. The overall project has four important components: (1) Integrated Flood Risk Management, (2) rebuilding ecosystems for natural defences, (3) Livelihoods, and (4) Capacity building. IFAD is financing the third component (see below).
2. SCRCP was screened as “Substantial Risk” in the climate screening procedure and therefore, this Targeted Adaptation Assessment (TAA) report was prepared. Given the socio-economic and climatic context of the targeted area, its aim is to identify and prioritize the adaptation measures to be implemented during the course of the project to achieve sustainable long-term results and impacts in terms of strengthened farmers’ resilience.
3. The TAA would nurture the PDR and provide guidance to Project Management Unit (PMU), implementing partners (IPs), communities and other departments like Agriculture Extension and Fisheries for the implementation of the concerned components and sub-components of the project to address concerns related to climate adaptation. It will elaborate the PDR and AWPBs, in particular with the PMU’s expert involved in climate adaptation. The Environmental Specialist and concerned staff of IPs will ensure field implementation and monitoring of the selected adaptations options including daily administrative, climate checks and records with periodic audits from PMU.
4. Within three districts of the project (figure 1), the Taluka (sub-district) and Union councils will be identified on the basis of poverty ranking, agribusiness development potential, available resource envelope and consideration of other ongoing projects and programmes.
5. The project will be executed by the Planning and Development Board of the Sindh government through a Project Management Unit at Karachi, and reporting to Project Steering Committee (PSC). PMU will include a climate adaptation specialist able to develop TORs and contribute to tender with a climate focus, as well as to assess skills of service providers and the quality of the support they provide to smallholders and stakeholders.

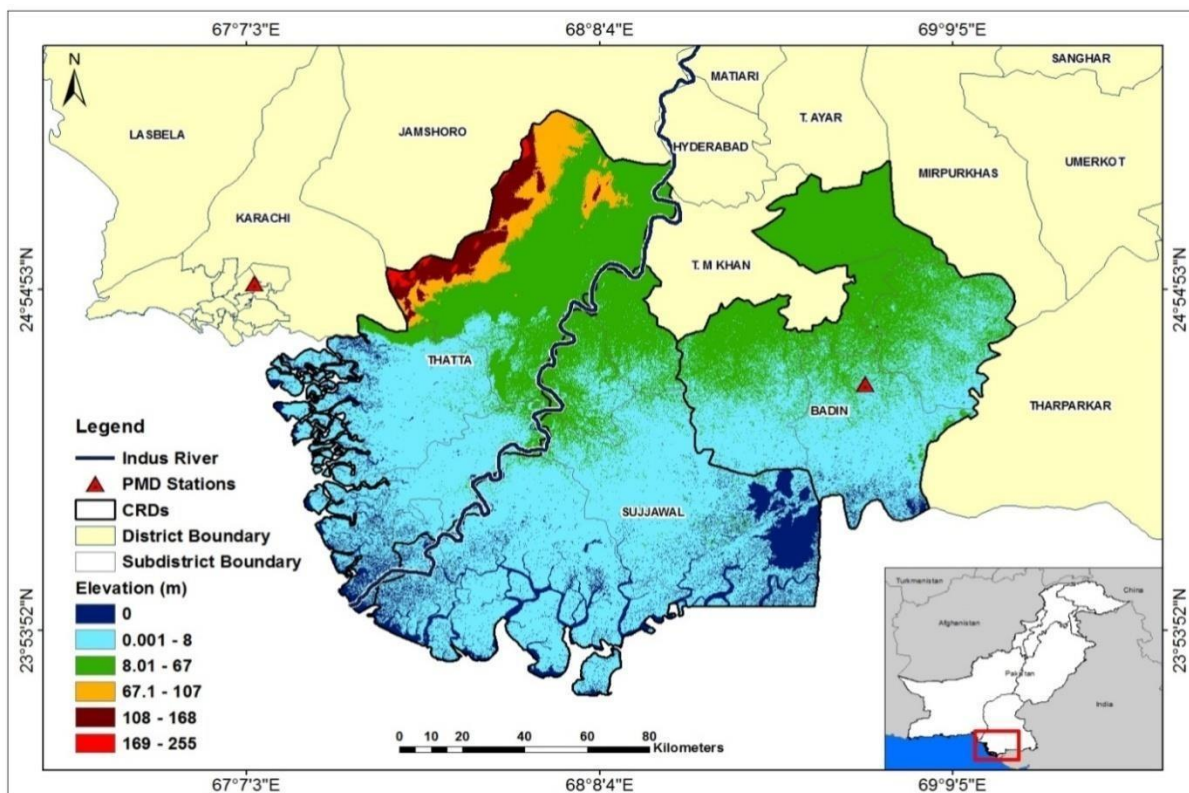


Figure 1. Location of Project area--Districts Thatta, Sujawal and Badin.

b) Project summary

6. IFAD is financing Livelihoods project in the three selected poor districts affected by ecosystem degradation and then particularly vulnerable to climate change. Fishing and agriculture are the common sources of livelihood, but the large majority of population is landless or own small landholdings and majority of fishermen work as hired hands on boats owned by others. The project is aimed at developing sustainable climate resilient food value chains and livelihoods for target agriculture and fisheries dependent poor communities in the selected three districts.

Targeting

7. SCRPs target the three poorest coastal districts with selected Taluka (sub-district) and Union council. Fishing communities in the coastal line and smallholders including women, youth, landless poor, daily wage earners and fishermen working as hired hands on others' boats will benefit from project interventions. Direct Target beneficiary households are estimated to be 150,000.

Project Components. The project is composed of two main components plus a project coordination and policy support component.

- a. **Component 1:** Transformation of Coastal Rural Incomes where rural communities will be organized and assisted to develop capacities for market oriented improved productivity and production and value addition. The component has four subcomponents: (1.1) Targeting and organization (1.2) Community and value chain support infrastructure, (1.3) Access to affordable finance, and (1.4) Institutional support.
- b. **Component 2:** Economic and Social Inclusion of Disadvantaged Groups having subcomponents (2.1) Economic graduation of landless poor, (2.2) Job market access.
- c. **Component 3:** Project Management and Policy Support

Each of the three components is concerned by climate adaptation and include specific adaptation options.

8. The ADB parallel financing includes river protection bunds, improved drainage, restoration of natural waterways, improved irrigation control and management infrastructure, bridges and link roads, mangrove plantation through community management and capacity building of communities and concerned departments.

Wherever possible, the programs of activities of the two projects will be coordinated as both are related to climate resilience for the same communities. The two sets of adaptation options need to complement each other to achieve lasting and effective impacts. The grey and structural interventions by ADB will control floods through rehabilitation of surface drainage system in the project area resulting in protection of assets, properties, livestock and agricultural lands and crops while green and nature-based solutions will help restore the ecosystem and control degradation of the system. IFAD will adopt options to increase resilience of the communities against climate change by introducing and implementing climate smart agriculture, aquaculture, asset development and capacity and skill development of the target groups for improved and sustainable livelihoods.

c) Date of preparation of the vulnerability and adaptation assessment

9. The Concept Mission of SCRCP was conducted in June 2023 when the SECAP Review Note was also prepared and subsequent reviews and comments were carried on until the Design Mission in November-December 2023. This TAA has been carried out simultaneously with the preparation of the Project Design Report in December 2023 and January 2024.

2. Indication of Hazard, exposure, sensitivity and adaptive capacity

d) Sindh Climate Baseline

10. The province of Sindh is situated in a subtropical region and is usually warmer throughout the year except December and January. The average annual temperature in Sindh is 27 degrees Celsius. It is highest in June at 34°C and lowest 17°C in January⁴⁸. Extreme temperatures go in summers (May to August) above 46°C and the minimum average temperature of 2°C (36°F) during winters (December and January) registered in the mountain of Sindh (up to 2.260 meter high). For precipitation, Sindh receives an average of 180 mm rainfall during a year⁴⁹. With 10 hours per day, March is the sunniest month while in July, the sun shines the least due to clouds. Average humidity is 45 percent. It is quite dry in April and quite humid in August with 69 percent humidity⁵⁰.
11. An analysis of the changes in minimum and maximum temperature and rainfall in Sindh coastal area has shown that yearly mean maximum temperature fluctuated between 32.3 to 35.1°C, while that of minimum mean temperature ranged between 18.8 to 20.8°C which revealed that mean minimum temperature was towards the higher side. The average rainfall has also reduced and the overall impact on surface water bodies and vegetation has been adverse from 1972 to 2010. Vegetation species diversity has been reduced considerably and currently the vegetation is dominated by salt tolerant shrubs like the family of Chenopodiaceae and Tamericeae⁵¹.
12. According to the Intergovernmental Panel on Climate Change (IPCC), there has been 0.6 to 1.0°C rise in average temperatures since early 1900s in the coastal areas of Pakistan. 10 to 15% decrease in precipitation in the coastal belt and hyper arid plains over the last 40 years has been observed. It has been predicted that the Western Himalayan glaciers may retreat during the next 50 years, resulting in decrease in downstream river flows by 30% to 40% over the subsequent fifty years⁵².

e) Current and expected climate trends

13. The vulnerability of Sindh to floods doesn't depend on the precipitation in the province but relies on the upstream flow of water through the Indus River. Any changes in temperatures, rainfall, snow and glacial melt in the upper Indus basin is directly affecting Sindh. Low snowfall in the mountains feeding the Indus River system means less water for Sindh and high temperature causing melting of snow and glaciers or heavy rain in the North part of Pakistan mean more water for Sindh and higher risks for floods. The heavy downpour of KP inundating the Indus Delta in 2010 is a good example.
14. Heavy rainfall of 2011 in Sindh resulted in heavy flooding and prolonged inundation in many districts. The study by Heurreux et. al. (2022) indicates a general increasing trend for precipitation (with values above 10 mm/year in some locations), supporting trends identified by Q.U.Z. et, al. (2009) earlier for the Punjab province. However, the latter study finds a

⁴⁸ [Climate: Sindh in Pakistan \(worlddata.info\).](https://www.worlddata.info/asia/pakistan/climate-sindh.php)

⁴⁹ Costs of Inaction on Climate Change for Sindh. Policy Paper, Government of Sindh. 2018.

<https://sindhsgds.gov.pk/wp-content/uploads/2020/10/Costs-of-Inaction-on-Climate-Change-for-Sindh.pdf>

⁵⁰ <https://www.worlddata.info/asia/pakistan/climate-sindh.php>

⁵¹ A. Alamgir, et al. Appraisal of Climate Change Impacts on the Coastal Areas of Sindh Using Remote Sensing Techniques. American-Eurasian J. Agric. & Environ. Sci., 15 (6): 1102-1112, 2015

⁵² <http://www.mangrovesforthefuture.org/assets/Repository/Documents/A-Handbook-on-Pakistan-Coastal-and-Marine-Resources.pdf>

decreasing trend in precipitation over the Sindh province for the period 1910–2007, while the work after 2007 shows an increasing trend, although with a smaller magnitude and without statistical significance.

15. The annual precipitation of Sindh also has non-significant increase i.e. 15 mm for the data period from 1914 to 2007. The summer monsoon has almost no change and winter precipitation also have non-significant increase of 7.5mm over the period mentioned. The World Bank and ADB (2021) has again warned of changes to Pakistan’s rainfall and runoff regimes, and hence its water resources, were highly uncertain, but an increase in the incidence of drought conditions was likely. Mean rainfall in the arid plains of Pakistan and the coastal belt has decreased by 10%–15% since 1960, contributing to the ongoing degradation of the country’s wetlands and mangrove ecosystems. Most other regions have experienced a slight increase, both in the monsoon and dry seasons. The number of heavy rainfall events has increased since 1960, and the nine heaviest rains recorded in 24 hours were recorded in 2010⁵³.
16. A recent study⁵⁴ has analyzed 57 years (1961-2017) time series climate data of Thatta, Sujawal and Badin districts and has shown rising trends in temperature. This study has concluded that the margin between the mean annual maximum and minimum temperature continues to get narrower. The 48 years (1961 to 2008) data analysis has also shown that precipitation seemed to be declining across these districts. Relative humidity and wind speed have decreased in Thatta and Sujawal while both are increased in Badin during 48 years.
17. Selected communities in the irrigated farming and fishing communities of Thatta expressed their concerns in a recent study⁵⁵ by saying that summers had become hotter and longer while rainfall pattern had become less predictable and more intense, with longer dry spells in between. Rains were destructive for crops, trees, and soil. Lightning storms were more frequent, threatening the lives of people and their livestock. Both farmers and fishermen complained that unpredictable weather made it difficult to make livelihood-related decisions, such as when to sow certain crops and when to sail out for deep sea fishing.

f) Hazard

18. Recent history of district Badin shows that it has remained in the grip of disasters in one form or another. Cyclone, heavy rains, droughts and floods have followed each other with short intervals⁵⁶. The frequency of floods from upstream, local heavy rains and droughts is higher than other hazards. Villages and union councils along the coast are having a history of being hit by cyclones. Being a dry region, Thatta always faces the risk of droughts. The Kohistan and desert zone of the district are especially vulnerable to this hazard as they face extreme shortage of potable water.
19. District Badin has been quite vulnerable to different climate related disasters (Table 1⁵⁷ below). It has seen two heavy rainfalls, three cyclones and seven flood events from 1964-65 to 2011, without taking 2022 into consideration.

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⁵⁴ S.U. Fatima et al (2021), INT. J. BIOL. BIOTECH., 18 (3): 485-497, 2021. Variation in Climatological Regimes in Coastal Rural Districts of Sindh, Pakistan.

⁵⁵ Khan, K., Khan, M., Parveen, T, and Hussain, S. (2021). Impacts of Climate Change in Vulnerable Communities in Sindh, Pakistan: Voices from the Community. Working Paper. Population Council, Islamabad: Pakistan.

⁵⁶

⁵⁷ Climate Change Risks and Vulnerabilities in Badin District, Sindh, Pakistan, ADPC, 2014.

Table 1. History of disasters in Badin

No.	Disaster	Year	Severity	Worst Affected Areas
1	Cyclone	1964–65	High	Union Council Ahmed Rajo, Union Council Bhugra Memon, Union Council Seerani, Union Council Mithi III, Union Council Khoski
2	Heavy Rainfall	1973	Medium	Taluka Badin, Taluka Shaheed Fazil Rahoo
3	Flood	1976	High	Ahmed Rajo, Bhugra Memon, Khorwah, Tarai, Garho, Seerani
4	Flood	1988	Medium	Ahmed Rajo, Bhugra Memon
5	Flood	1994	High	Entire District
6	Cyclone	1999	High	Entire District particularly near the coastal belt
7	Earthquake	2001	Medium	Taluka Badin, Taluka Shaheed Fazil Rahoo
8	Flood	2003	High	Taluka Badin, Taluka Shaheed Fazil Rahoo
9	Cyclone	2007	Medium	Union Council Ahmed Rajo, Union Council Bhugra Memon, Union Council Khorwah, Union Council Tarai, Union Council Garho,
10	Heavy Rainfall	2007	Medium	Taluka Badin, Taluka Shaheed Fazil Rahoo
11	Flood	2010	High	Taluka Badin, Taluka Shaheed Fazil Rahoo
12	Flood	2011	High	Taluka Badin, Taluka Shaheed Fazil Rahoo

20. Coastal areas of Sindh are highly vulnerable to tropical cyclones and associated storm surges. Tropical cyclones have struck coastal areas in 1999, 2000 and 2010 causing damage to the lives and properties of coastal communities. The changing climate is resulting in increased frequency, intensity and changes in tracks of storms⁵⁸.
21. Cyclones have also negatively impacted the coastal districts. Cyclones will destroy human villages and result in the immense loss of human and animal life, as well as the devastation and disruption of fishing vessels, which will have a significant effect on the livelihoods of the majority of residents. Tropical cyclones have historically emerged over the Arabian Sea and settled on the coastal areas of Sindh. On many occasions, the districts of Thatta and Badin have been seriously affected⁵⁹.
22. Floods in 2022 in the three districts...The floods brought heavy devastation including losses of human lives, livestock, agriculture and infrastructure. Overall, 57 people had died in these districts where 41 were in Badin, 11 in Thatta and 5 in Sujawal. Among the population affected, Thatta was the hard hit with 23.5 % of its population, Sujawal 19.5 % followed by Badin with 16%. The floods struck before the harvesting of major crops like sugarcane, rice and cotton.

⁵⁸ <http://www.mangrovesforthefuture.org/assets/Repository/Documents/A-Handbook-on-Pakistan-Coastal-and-Marine-Resources.pdf>

⁵⁹ <https://docc.sindh.gov.pk/files/DoCC/Documents/NAP%20Final%20Draft-edited.pdf>

Badin lost about 17 % of its crops, Sujawal suffered about 13.9 % losses while 8.03 % of Thatta crops were lost⁶⁰. Sindh grows high value vegetable crops of onion, tomato and chilies suffering economic loss of about USD 374 million in the affected districts with highest losses in Thatta, Badin and Mirpurkhas⁶¹. In addition, heavy casualties of livestock and serious damages to infrastructure were also reported.

23. The increased risks to the coastal areas and the Indus deltaic region due to sea level rise, coastal erosion, and increasing cyclonic activity in the Arabian Sea⁶² have compounding effects. The Indus Delta is located in the heat zone and is impacted by any rise in temperature, floods, droughts and cyclones. In this region, temperature is likely to increase by 4°C till 2100 and rainfall is going to be highly variable on temporal and spatial scale. The deltaic region would not only be affected by the local weather conditions but also weather activities upstream Indus and over the neighboring sea in the south due to climate change.

g) Exposure

24. The three districts are densely populated, with limited infrastructure and poor-quality housing (see SECAP Review Note, table 1). Except in the coastal zone, dedicated to mangrove and tidal areas, the project zone is also largely devoted to agriculture. This context explains the high level of exposure.
25. An increase in the number of people affected by flooding is projected, with a likely increase of around 5 million people exposed to extreme river floods by 2035–2044, and a potential increase of around 1 million annually exposed to coastal flooding by 2070–2100⁶³.
26. A severe tropical cyclone (2-A) affected the Indus River Delta on 20th May, 1999 (winds gusting up to 270 km per hour, impacted the coastal towns and villages of the districts of Badin and Thatta in Sindh province). At least 0.6 million people in 5,200 villages were affected. 82,181 houses were destroyed and 67,285 damaged. Some 400,000 acres of agricultural land were inundated with salt water, and 28,000 livestock perished. 675 fishing boats were destroyed and 191 people, mostly fishermen, were reported killed⁶⁴.
27. The low-elevation coastal zone (LECZ) having an elevation below 10 m spreads over vast areas of about 12,250 sq. km (94 percent) of delta, thus, highly vulnerable to coastal inundation. Almost, all major cities of the delta are located in LECZ, hence are under high risk of coastal flood inundation⁶⁵. The economic impact of this exposure is huge on agriculture when two crop seasons (Rabi and Kharif) are affected. About 70 percent of the cultivable area of the delta is cropped during the during Rabi and Kharif seasons. The estimated agricultural economic loss of delta due to coastal flooding in Kharif season could be estimated as Rs. 30 billion from rice

⁶⁰ Floods 2022 Sindh. Provincial Disaster Management Authority, Sindh.

⁶¹ <https://reliefweb.int/report/pakistan/2022-pakistan-floods-assessment-crop-losses-sindh-province-using-satellite-data>

⁶² Climate Change in Pakistan, Focused on Sindh Province. https://www.pmd.gov.pk/report_rnd.pdf

⁶³ Climate Risk Country Profile. World Bank and Asian Development Bank, 2021.

⁶⁴ <http://www.mangrovesforthefuture.org/assets/Repository/Documents/A-Handbook-on-Pakistan-Coastal-and-Marine-Resources.pdf>

⁶⁵ Dr. Altaf Ali Siyal and Dr. Zia ur Rahman. Impact of Climate Change in the Indus River Delta and Coastal Region of Pakistan. Global Change Impact Studies Centre (GCISC) Islamabad.

only while in Rabi it could be in the range of Rs. 27 billion⁶⁶. Except for agricultural loss, environmental, ecological and infrastructure losses would also be severe.

28. With sea level rise and decreased flow of freshwater in Indus River, the sea is encroaching Indus's delta and the courses Indus has left in Thatta. The sea intrusion is also severely affecting the aquifers at many places in the district where groundwater and lands have become saline.

29. The 2022 rains flooded vast areas, casualties rose to 799, and 4.4 million acres of agricultural land were destroyed. Between October 2022 and January 2023, PKR 5.7 billion (approximately US\$20 million) in retroactive financing was utilized for plugging and reinforcing 208 major breaches at bunds, canals, and drains, fixing pumps and motors, and rehabilitating small dams to restore functionality of the irrigation system⁶⁷.

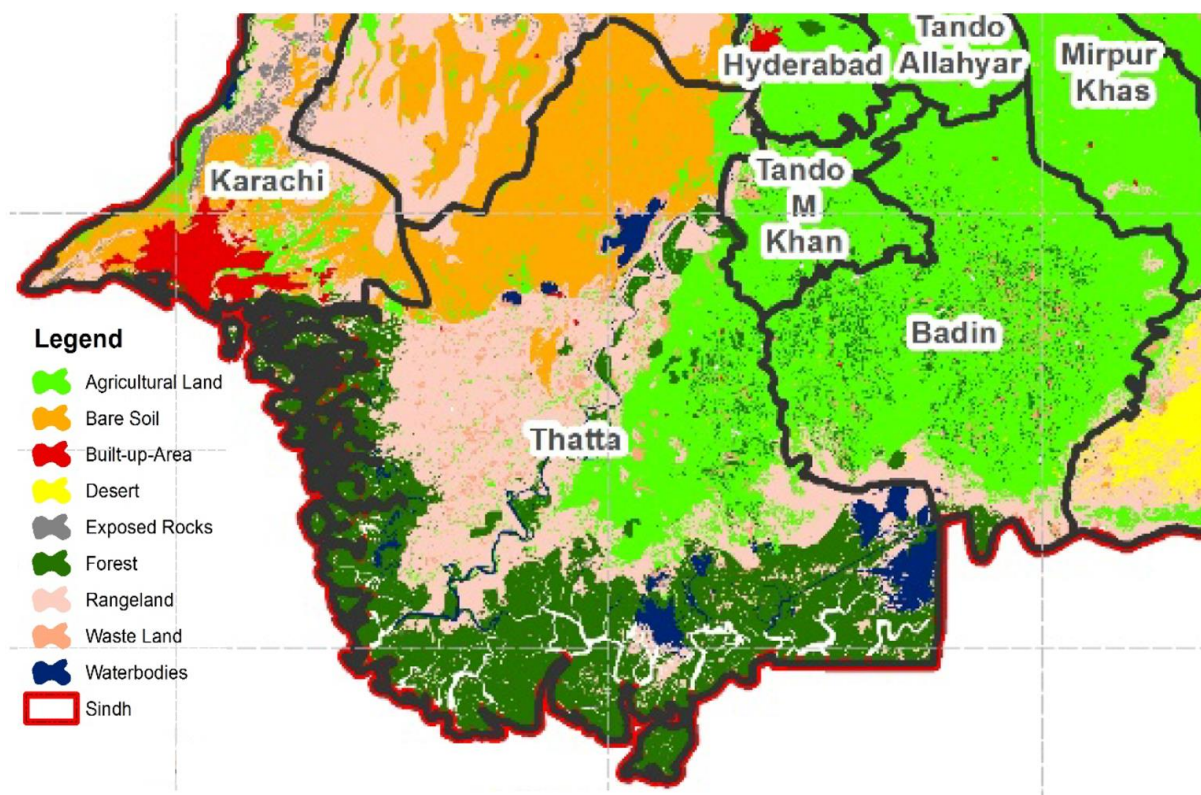


Figure 2 Sindh Topography (from the Sindh Climate Change Policy -2 2022) – Sujawal was part of Thatta district

h) Sensitivity

30. Sensitivity to climate change, in the three project districts, is all the greater as ecosystems are severely degraded, and the rural population is poor, leading to snowball effects.

⁶⁶ Dr. Altaf Ali Siyal and Dr. Zia ur Rahman. Impact of Climate Change in the Indus River Delta and Coastal Region of Pakistan. Global Change Impact Studies Centre (GCISC) Islamabad.

⁶⁷ <https://www.worldbank.org/en/news/feature/2023/06/28/rising-from-the-waters-sindh-navigates-recovery-after-the-2022-floods>

31. Overfishing, mangroves degradation and climate have been affecting the livelihoods of the fisherfolk. A study in the three coastal districts⁶⁸ has concluded that the income of the fishermen with small boats has reduced as fish is now not available near the shore as compared to a couple of decades back. Fishermen have to go deep into the sea for a good catch, but it cannot be done with small boats and inadequate facilities therein. Similarly, decrease in freshwater lakes in the Indus delta has also adversely affected the livelihoods, incomes and socioeconomic status of the fishing communities.
32. It is estimated that within the period of 2000-2025, the sectors of agriculture, forestry, and fisheries may face a loss of PKR 1.3 billion due to climate change⁶⁹. Due to heavy reliance of marginalized communities, particularly in rural areas, on natural resources, climate change impacts can significantly reduce their assets, trapping them into a never-ending cycle of poverty.
33. Discussions with communities during field visits revealed that rising debt of the sharecroppers in agriculture and fishing communities was another serious impact among the multiple climate change impacts people were faced with. People have to seek loans after every disaster (floods, drought, cyclones, etc.) from landlords and middlemen which lock them in an unending contract with the lender. Sometimes, the landlords recover the entire harvest as repayment for the Hari's share of the input costs, or as repayment of earlier loans.
34. Researchers found that climate change can lead to conflicts over water and agriculture, all the more sensitive as the districts of Badin, Thatta and Sujawal are highly vulnerable to climate change⁷⁰. District Sujawal showed higher vulnerability in adaptive capacity as compared to the other districts due to poor infrastructure and high dependency on natural resources. However, the district of Badin demonstrated high vulnerability in terms of sensitivity and its exposure to conflicts over agricultural resources. The overall Climate-Water Conflict Vulnerability Index (CWCVI) and Climate-Agriculture Conflict Vulnerability Index (CACVI) scores were higher in Badin and Thatta, respectively.
35. Badin is exposed to sea intrusion and cyclones. Climate change and extreme events create risks and vulnerabilities in a number of key areas within the local ecosystem and livelihood structure. According to the data from the District Revenue Office of Badin, the cropped area has reduced from 203,000 acres in 2001–2002 to 153,000 acres in 2005. According to farmers, the sea erosion has turned more than 85,000 acres of cultivable land into barren patches. The coastal areas of Badin, along with neighboring Thatta district, were home to the best breeds of buffalo, red cows, and camels. However, erratic climate patterns during the past decade have caused flooding, drought, and sea intrusion thereby depleting sources of grass and fodder. The successive floods in 2010 and 2011 have only worsened the situation for large livestock rearing in the coastal areas of Badin⁷¹.
36. Climate change has increased high tides in the sea resulting in idle (no work) days for fisherman and damages to boats. Unlike the past, many species of fish, crabs, and shrimps, crabs, lobsters, and prawns are not frequently available near shore and fishermen have to fish in open sea

⁶⁸ Iqbal and Abro, 2021. Pakistan Journal of Social Research ISSN 2710-3129 (P) 2710-3137 (O) Vol.3, No. 3, September 2021, pp. 106-118.

⁶⁹ Sindh Climate Change Policy, 2022.

⁷⁰ <https://pubmed.ncbi.nlm.nih.gov/35776215/>

⁷¹ Climate Change Risks and Vulnerabilities of Badin District in Sindh Province, Pakistan, OXFAM and ADPC. 2014.

which is expensive for small and poor fisherman due to cost, fuel and maintenance of engines and many fishermen do not afford that affecting their livelihoods.

i) Adaptive Capacity

37. A number of institutions, policies, legal acts, programmes exist at the national and provincial level for mitigating the impacts of climate change in the province. The Federal Cabinet approved a National Adaptation Plan (NAP) in July 2023 for an effective response to increasing frequency of climate change induced disasters. NAP is a framework for implementing large-scale environmental adaptation, building climate resilience, promoting inclusivity, facilitating collaboration among different stakeholders, and serving as an effective tool for climate finance mobilization. The plan outlines ten priority areas including addressing increasing water scarcity, protecting natural endowments, urban resilience, human capital development and disaster risk management.
38. The government of Sindh has enacted the Sindh Climate Change Policy 2022 enabling the concerned departments and agencies to implement relevant laws, rules and regulations for taking remedial steps for mitigating the impacts of the climate change in different areas. The policy is to ensure that climate action is mainstreamed in the development planning and especially in the economically and socially vulnerable sectors of the economy; and to steer Sindh province towards green growth and climate compatible development.
39. Sindh Environment Protection Agency, Sindh. The Sindh government has established Environmental Protection Agency (EPA) in 1989 and is housed in the Environment, Climate Change & Coastal Development Department that was established in 2016. Regional Offices have been established at Karachi, Hyderabad, Mirpurkhan, Larkana and Sukkur.
40. Sindh Coastal Development Authority is responsible for protecting the coastal areas from different disasters while Irrigation Department is involved in flood control, protection, and drainage. The Sindh Provincial Disaster Management Authority (PDMA) deals with natural or man-made disasters in the province and is mandated to engage in activities concerning all four stages of Disaster Management Spectrum. Agriculture Department (Research and Extension) is one of the major players in implementing and supporting actions by developing salt, heat and drought resistant varieties of crops. Similarly, is the role of Fisheries Department which can support the marine and freshwater fisherfolk in improving their livelihoods.
41. These agencies have been trying to help the affected population during the disasters on emergency basis but have limited financial and human resource capacities to carry out long term measures for mitigating the impacts of climate change. In many cases UN, lending agencies and other NGOs have been actively involved to enhance the capacity of communities and government to meet such challenges.
42. The Agriculture Department is widely present and is already involved with FAO in introducing climate smart agriculture in the coastal districts for the last couple of years and has developed enough capacity to demonstrate the same in IFAD targeted union councils and communities, however, the mobility of this department is usually a constraint in many areas due to lack of resources.
43. Some ongoing projects currently contribute to build capacities related to improved agriculture in the context of Climate Change and high vulnerability in Sindh and in Pakistan. To name a few evolving in Sindh: the World Bank funded "Sindh Water and Agriculture Transformation" (SWAT) Project and the GCF/FAO project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management - TIBCRAWM". They contribute to strengthen extension services in Climate Smart Agriculture, develop agrometeorological services, implement Integrated Pest and Fertility Management Plan, or improve water management, thereby

enhancing the resilience of smallholders. Organizations such as WWF-Pakistan, in addition to mangrove restoration programme, support farmers in testing fodder production in tidal areas, or innovate in tunnel farming to boost farm incomes. SCRPs should build adaptation options on these experiences and outcomes.

3. Adaptation options

j) Regulatory context for climate adaptation in Sindh

44. The Sindh Government has adopted in 2022 the Sindh Climate Change Policy (SCCP). It is a reference framework for the various interventions in the areas of climate change in Sindh. The vision of the Policy is to define a framework by Sindh government for sustainable socio-economic development that integrates the challenges of climate change in all sectors of its development in order to improve the well-being of the populations. Sindh’s Climate Change Policy comprehensively addresses all possible challenges of Climate Change adaptation and mitigation in foreseeable future; and sure to provide rock solid foundational framework for ensuing Climate Change Action Plans, Programs and Projects.
45. The SCCP adopted a series of proposed measures in various sectors, including agriculture, livestock, water resources and fisheries that should guide the SCRCP (the numbering has been adopted for ease of future reference).

Proposed policy measures for Adaptation in AGRICULTURE (A)	
A.1	Take measures to reduce crop failures, and improve crop health by reducing disease outbreak and impact of extreme events
A.2	Promote use of climate resilient, organic (fertilizers & pesticides), and high yielding inputs and practices
A.3	Commission relevant institutions and departments to undertake scientific studies on plant-pathogen relationship and patterns of pest and disease spread specific to Sindh and specific to projected changes in temperature
A.4	Develop appropriate digital simulation models for assessment of climate change impacts on physical, chemical, biological and financial aspects of agricultural production systems in various agro-ecological zones
A.5	Reduce migration to urban areas by providing farmers and communities localized livelihood diversification options
A.6	Improve demand forecast, access to farm produce, market structures & supply chains, ensure value addition of produce
A.7	Through viable legislation and land-use planning ensure that fertile land is prioritized for agricultural use and discourage conversion of this land for town planning, non-agricultural purposes, and deforestation
A.8	Establish climate change units or centers at agriculture research organizations in the province to; categorize areas according to their vulnerability to extreme climate change events, climate resilient crop varieties, modern farming techniques
A.9	Promote water efficient farming techniques, especially in low rainfall areas, such as drip irrigation, precision farming, laser levelling, and nutrient management etc.
A.10	Increase reliance on crops & agricultural inputs, and improve food security
A.11	Reduce the soil degradation caused by water logging, and salinity through crop rotation techniques, water efficiency, and rainwater harvesting
A.12	Introduce cropping zones and new crop rotations as per climatic conditions of different areas of the province
A.13	Introduce bio-pesticides and bio-fertilizers for soil conservation

Proposed policy measures in Adaptation in LIVESTOCK (L)	
L.1	Promote local high pedigree and drought-resistant varieties of livestock and poultry to reduce disaster risk to livestock and livelihoods
L.2	Diversify income streams in the livestock sector by treating livestock as saleable asset and animal by-products as fuel and recognizing their role in poverty reduction, resilience building, and increasing food security
L.3	Arrange livestock management training programmes for farmers, including women, especially during disasters
L.4	Improve grassland and grazing management by controlling intensity and timing of grazing
Proposed policy measures in Adaptation in WATER RESOURCES (W)	
W.1	Promote water-efficient irrigation strategies such as drip/ sprinkle irrigation in order to conserve water in the highest water consuming sector.
W.2	Promote rainwater harvesting in villages as localized solution for improving availability of water
W.3	Develop and implement integrated water resource management
W.4	Regulate, monitor and protect groundwater usage especially in the coastal areas to curb sea-water intrusion in coastal aquifers
W.5	Introduce laws pertaining to private sector usage (domestic and industrial) of water and enforcement of existing laws to protect the water resources of the province.
W.6	<i>Prepare an up-to-date inventory of water resources for the province, including surface and ground water</i>
W.7	Address the needs for additional water storage and distribution infrastructure particularly small dams in arid/ semi-arid areas of the province and improve municipal water resources and infrastructure
W.8	<i>Increase expenditure on research in the water sector to minimize water losses and encourage conservation practices.</i>
W.9	<i>Strengthen the capacities of relevant stakeholders and government officials for monitoring, protection and conservation of water resources including municipal water authorities.</i>
W.10	<i>Ensure access to water in arid areas of the province and invest in building early-warning systems in the face of natural hazards such as floods and droughts.</i>
W.11	Reverse Osmosis Plants to be employed in areas that lack water fit for human consumption.
Proposed policy measures in Adaptation in FISHERIES (F)	
F.1	Adopt integrated ecosystem approach with three main pillars: managing fisheries and aquaculture; adapting to climate change; and reducing risk from natural disasters
F.2	Promote and develop to climate resilient, indigenous, and high yielding fish varieties
F.3	Initiate training programs on sustainable fishing techniques and business development skills for small scale farmers especially the fisherwomen
F.4	Formalize fish farms and aquaculture as an industry
F.5	Promote use of low energy intensive technologies which increase heat recovery in refrigeration and encourage the use of solar water heating on fish farms
F.6	<i>Protect the fish habitats including Mangroves (Marine) and terrestrial ecosystems (Fresh water) by strengthening regulatory regime to reduce the release of harmful</i>

chemicals from industrial and municipal sources and control the use of illegal fishing techniques

- F.7 Fill critical gaps in knowledge to assess the vulnerability of fisheries and aquaculture to climate change, especially on small scale farmers
- F.8 Improve lives and livelihoods of fisherman through sustainable management of fisheries and its by-products
- F.9 *Devise strategies for maintaining current and restoring damaged ecosystems to respond to the challenges faced by wildlife due to climate change*

k) General considerations

46. Communities informed during field visits that awareness campaigns have been run under different projects and they were now adapting to the prevailing environment to protect their lives, homes and livestock from the disasters. In some cases, new houses and animal sheds are built on about 4 to 5 feet higher platforms to protect from floods. Also, protection bunds are constructed with local material and plantation carried out to protect their soils from erosion.
47. The project components are designed to encourage livelihood diversification, and climate adaptation considerations in order to face the problems in the context of climate change. Building the capacity of vulnerable target groups to diversify activities through investments in new/alternate means of income generation including off-farm enterprises, skill development for employment and business development, value chain development and participation, productive asset ownership etc. together with provision of climate resilient support infrastructure and awareness are key interventions of the project. **The vulnerable groups (women, the poor, and young people) will become more resilient to hazards associated with climate change as a result of increased and diversified incomes and capacity, and training components included in the project.**
48. Smallholder farmers and target groups display a moderate awareness of climate risks and related adaptive and mitigation measures. Project efforts to build the adaptive capacities of its beneficiaries will emphasize the need for disaster risk planning, climate resilient cropping, better land agreement (to ensure that investment in soil quality pays off), drought management practices, and reduced post-harvest losses, among other interventions that build the beneficiary's capacity to cope with, or recover from, the effects of climatic shock events. **The Project will work with them under component 1 for 2 to 3 years of crop seasons for sustainable adaptation of the proposed interventions.**
49. The ever-decreasing water flows in the deltaic region and its impact on marine life, due among other things to decreased sediment and nutrients flow to the sea, have already impacted deltaic and marine life. At the same time, trawlers and new fishing nets are catching everything in the sea threatening population of fish on one hand and livelihoods of small fishermen on the other. The Sindh Fisheries Department and the project will work with the concerned communities to promote use of safe and sustainable fishing gears to prevent entanglement of and damage to marine life (under component 1). Local fishermen and coastal area inhabitants should be trained to monitor and inform the concerned line departments of any changes in sea currents and fish stock movement. The inland habitat of the fish in the lakes will also be protected with the involvement of local communities and Fisheries Department. The Project will also promote aquaculture farms at potential sites and will avoid activities in the vicinity of water bodies in the target districts that will have any negative impact on the biodiversity and natural habitat of flora and fauna.

50. New business opportunities (Component 2) can provide sustainable inputs and services to agriculture, livestock and fisheries/aquaculture, supporting their transition to climate adaptation.
51. Research, experimentation with participation of smallholder should be supported to test innovative measures accessible for rural poor communities. This is the purpose of the innovation change funds under Component 3, to develop participative new solutions oriented to market and business opportunity and social resilience.

I) Climate adaptation project proposal

52. SCRCP is guided by the national priorities for climate change adaptation and the adaptation options assessment have been further explored during design. They should be finalized exercises under project inception phase. Furthermore, it is proposed that PMU every year address a report to GoS and explain to what extent, project activities have contributed to, and/or have mobilized the measures of the Sindh Climate Change Policy.
53. The IFAD Adaptation Framework has been used. It is a database of adaptation options (completed with literature review of document in Sindh, lessons learned from IFAD projects and consultation during design mission) and a system for the assessment and prioritization of these options have been developed as part of IFAD's Adaptation Framework. The prioritization process consists of two main elements. First, adaptation options are filtered based on the project sector and climate risks identified during the climate screening process. A Multi-Criteria Analysis (MCA) is then carried out on the shortlisted adaptation options to help select measures to integrate into the project using the following criteria assessed from 1 to 3:
 1. Technical feasibility
 2. Cost-benefit ratio
 3. How well the option addresses risks in the project context
 4. Complementarity to other IFAD themes
 5. Flexibility (i.e., avoids lock-in)
 6. Mitigation co-benefits
 7. Transformative potential
 8. Accessibility for small-holder farmers
54. Then each of the proposed adaptation measure have been classified vis-à-vis the SCCP measures listed above.

Sector/Approach	Ranking score (/24)	Practices
CSA / Agroecology	22	Reforestation / hedge (to reduce impact from weather extremes and spread of pest
CSA / Agroecology	21	Kitchen garden associated with cash crop
CSA / Agroecology	20	Maximizing crop, soil and animal biodiversity to reduce diseases and pest outbreaks (Diversify agricultural activities within single farm units)
CSA / Agroecology	20	Research traditional farming practices to identify approaches that may be suited to a different climate
CSA / Agroecology	20	growing onion, sugarcane and wheat in ridges, instead of the traditional cotton-wheat rotation
CSA / Agroecology	20	Training on best harvest timing and technics
CSA / Agroecology	20	Integrated Plant and Soil Nutrient Management (IPSNM)
CSA / Agroecology	19	Optimize crop calendars
CSA / Agroecology	18	Test and promote Agroforestry
CSA / Agroecology	18	Intercropping to replace the kind of monoculture that has been causing disease infestation, land degradation and decreased output of major crops
CSA / Agroecology	18	Improved semi-dwarf wheat cultivars available in Pakistan
CSA / Agroecology	17	Selection of species (animal and vegetable) more adapted to the environment (water needs, extreme hot temperature, soil salinity, short cycle varieties)
CSA / Agroecology	17	Maximizing organic matter production through green manure, cover crops and agro-forestry
CSA / Agroecology	17	Increased use of livestock manure as a cost-effective fertilization strategy that also builds up organic matter in the soil
CSA / Agroecology	17	Use of improved open pollinated crop varieties which are more resistant and productive
CSA / Agroecology	17	Bio-fertilizers
CSA / Agroecology	17	Make use of integrated systems involving livestock and/or aquaculture to improve resilience.
CSA / Agroecology	16	Intercropping maize with cotton
CSA / Agroecology	16	Recover and use all kind of crops residues (such as banana leaves, Rice => paper with the strow + textile, husk in briquets and in alcohol (for fuel) via bio fermentation process; Sugarcane => burning to make electricity) for income diversification with no/limited pressure on ecosystem
CSA / Agroecology	16	Ensilage of corn residues as food for cow fattening
CSA / Agroecology	16	Improving crop rotations by growing legumes as food crop or live mulch (cover crop)
CSA / Agroecology	15	Split fertilization
CSA / Agroecology	15	Develop soilless production (livestock and crops such as Goat raising and ginger cultivation)

CSA / Agroecology	15	Produce fodder on tidal areas (resources diversification, ecosystem protection, livestock)
CSA / Agroecology	15	Enhancing natural processes of nutrient recycling through managing plant-soil-pest-predator interactions;
Water management	19	Small reservoirs
Water management	19	Raised bed systems
Water management	18	Construct new water harvesting infrastructure // Improve existing water harvesting infrastructure (incl. trap and collect run-off and rainwater to maintain productivity of pasture)
Water management	18	Alternate wet and dry rice with line sowing, which saves water and increases the plant population (resulting higher yield and income as compared with the traditional method)
Water management	16	Identified the Professional Beneficiaries trained in the water and agriculture sectors to use IT tools to inform planning and decision-making related to climate change, agriculture and water.
Water management	16	Laser land levelling to ensure homogenous water application, water saving, uniform germination and decrease water pounding in the field (resulting in higher yields)
Water management	15	Animal shelter
Water management	15	Direct seeding rice, which saves water, time and costs associated with traditional transplanting and inputs (resulting in higher yields and income)
Water management	13	Change approach to farmland management to work with flooding, rather than fighting against it (particularly in flood plains where flood sediments increase productivity of pastures)
Water management	13	Improve efficiency of water consumption through smart irrigation and drop irrigation technologies, smart control systems and reduce water loss and water delivery
Water management	13	Market-based pricing of irrigation water to encourage water-thirfty and water productivity
Livestock	21	Use non-climate sensitive sources of fodder
Livestock	19	Preventive animal health programme for livestock
Livestock	19	Diversity sources / type of feedstock
Livestock	19	Move livestock to higher ground in dry season
Livestock	16	Build larger fodder storage facilities
Livestock	13	Cut and carry fodder system
Livestock	13	Reduce grazing intensity to reduce soil erosion; Re-schedule grazing patterns
Fishery	20	Install and maintain low-cost fish aggregating devices (FADs) for subsistence fishers

Fishery	19	Promote culture-based fisheries (CBF) and stock enhancement practices. [e.g. collecting wild or farmed seed/larvae/fingerlings, growing them to sizes at which they have higher survival rates and then releasing them.]
Fishery	19	Support the transition to new fishing gear and identify and promote fisheries that target underexploited species.
Fishery	13	Seaweed production in tidal areas for methane production or fodder
Aquaculture	19	Upgrade aquaculture facilities to withstand extreme weather and disasters [e.g nets or higher dykes to withstand flooding, landing site, safer boat)
Aquaculture	19	Promote brackish-water aquaculture systems on flooded and/or salinized land and water bodies for coastal agro-communities whose land has been lost. This can include cultivation of aquatic plants for consumption and for production of useful products, such as biofuel, plant protein and alcohols. In the longer term, such systems can rehabilitate the soil.
Aquaculture	19	Test, in Sindh condition, integration of aquaculture with agriculture [rice-fish or poultry-fish; water reservoirs and canals]
Aquaculture	19	Promote best management practices (BMPs) and biosecurity in aquaculture production models
Aquaculture	17	Encourage Integrated Multi-Trophic Aquaculture (IMTA)
Aquaculture	17	Improve aquaculture farm siting and design
Aquaculture	15	Shift sensitive species upstream; introduce marine or euryhaline species (wide salinity tolerance); use hatchery seed, protect broodstock and nursery habitats
Aquaculture	13	Fish meal/oil replacement; better feed management; genetic improvement for alternative feeds; shift away from carnivorous species; culture of bivalves and seaweeds
Food processing and storage	22	Improved stoves at village level and in fishery processing (Reforestation: supporting measure to ADB component)
Food processing and storage	22	Early warning systems for food transportation
Food processing and storage	21	Immediate drying techniques
Food processing and storage	21	Training on optimum temperature range, Temperature and humidity sensors, and preserving techniques
Food processing and storage	20	Safe, efficient routes for transportation of fresh food
Food processing and storage	17	Climate proof warehouses
Food processing and storage	17	Cold chains, cold rooms, ventilation and ice cooling

Food processing and storage	17	Change post-harvest practices, for example the extent to which grain may require drying and how products are stored after harvest.
Food processing and storage	16	Insulation of refrigerated trucks
Food processing and storage	15	Reduce time of storage
Market	20	High value crops
Market	19	Contract Farming
Transversal	22	Diversify livelihoods / create income sources from activities other than agriculture, fisheries and forestry, and if possible protecting the ecosystems
Transversal	20	Seek to reduce other pressures on the forest to increase its resilience to climate change
Transversal	20	Ensure adequate numbers of agriculture department and NGO staff and necessary equipment for emergency repairs to damaged buildings and infrastructure
Transversal	20	Consider the effect of new weather patterns on the health and well-being of agricultural workers.
Transversal	19	Establishment of agriculture service hubs (or farm service centres) at Tehsil level oriented to resilient agriculture
Transversal	19	Train staff to build understanding of climate change / improve operational performance in dealing with climate risks
Transversal	18	Loans provisions for smallholder with mandatory climate adaptation plan to the borrower
Transversal	17	Oriente the innovation fund to Climate adaptation
Transversal	17	Climate proofing of engineering norms and building codes (for equipment provided by the project)
Transversal	16	Enhance markets and trade's contribution to stability of food security - e.g limiting trade restrictions
Transversal	13	Agriculture, Livestock and Aquaculture insurance

Annex 23: Technical Modalities of Access to Finance/Financial Inclusion

Managing Agency and Partner Bank Contracting

1. PMU will contract a one or more credible banking institutions with the track-record and established systems to manage its interest subsidy scheme.
2. State Bank of Pakistan - SBP (central bank) is one of the institutional options to manage the Project's loan subsidy scheme. SBP possesses the institutional capacity and track-record to manage loan subsidy schemes for multilateral and bilateral development financial institutions and Government of Pakistan.
3. The role of SBP will include contracting partner banks, manage the performance of banks on utilization of the limits for interest subsidy, address issues (perhaps jointly with IFAD and PMU) and receive, process and pay the claims from the Project funds. PMU / IFAD will get periodic reporting from SBP on pre-defined formats.
4. Planning Department, Government of Sindh and PMU will share the design of the access to finance component with the Project targets and any other details required by SBP.
5. Planning Department, Government of Sindh will enter into a contract with SBP to manage the interest subsidy scheme.
6. SBP will develop the terms of the interest subsidy scheme, review and approve internally and then seek feedback from banks operating in the agricultural sector in Pakistan. This will include but not limited to: eligibility criteria for borrowers, value chains to be financed, purpose of financing, maximum loan size, collateral structure, repayment structure, exclusion list of activities to be financed etc.
7. SBP will then select banks either through competitive bidding or solicit interest of banks operating in the three districts that have an established focus in agricultural finance.
8. PMU / Planning Department, Government of Sindh will provide interest subsidy funds to SBP based on the financing projections for the first year.
9. SBP will invest the excess funds to maximize returns while investing in risk-free investment instruments. This is expected to increase the pool of funds available to SBP for the Project beneficiaries support.
10. PMU and SBP will contract a legal firm to draft the contract that will be executed between SBP and partner banks.
11. SBP will share the terms of the interest subsidy scheme with partner banks.
12. SBP, PMU and IFAD will negotiate the benchmark lending rate for banks. This benchmark interest rate will be used to determine the amount of subsidy to be provided to partner banks.
13. SBP will enter into contracts with the partner banks that will provide an agreement on the terms of the interest subsidy. Among other conditions, one of the conditions in this contract will be that partner banks will:
 - a. Develop tailored cash-flow based programmed lending products for each targeted value chain
 - b. Offer savings, payments, remittance products to the Project beneficiaries.
 - c. Extend training on financial and digital finance literacy
 - d. Offer digital finance channels in proximity to the beneficiaries

- e. Partner with insurance companies to offer life, health, livestock and climate risk insurance products to beneficiaries (both borrowers and non-borrowers) in the three districts
- f. Beneficiaries with negative e-credit information bureau report of more than the last 2 years will be eligible to access the interest subsidy
- g. Partner banks will not be allowed to obtain any tangible collateral from the beneficiaries. Beneficiaries who are already borrowers of the bank and have provided tangible collateral will have their collateral released. This information will have to be disclosed by the partner bank to SBP.
- h. At no point will the beneficiary have to visit the bank branch except for withdrawal of the loan disbursed amount if so preferred by the beneficiary.
- i. Reporting structure: monthly reporting templates will be provided to partner banks for submission to SBP

Pre-Lending Development Activities

14. SBP will seek applications from partner banks for allocation of limits for interest subsidy. The amounts allocated to each partner bank will be calculated by SBP based on each partner bank's projected financing for 3 years and the institutional capacity of the bank. The limits allocated will be for a quarter or six months and will be subject to revision based on the performance of each partner bank.
15. PMU will share with partner banks the design phase documents and value chain studies conducted in the three districts on the targeted value chains.
16. PMU will share the names of the villages to be targeted by the Project with the partner banks. PMU will provide partner banks with its annual plan for village organization (VO) and interest group mobilization (since all villages cannot be approached simultaneously)
17. Partner banks will share with PMU the key data points required to process loan application and offer financial services to the beneficiaries. PMU will include these in the data to be collected during village organization and interest group mobilization.
18. PMU will purchase a software and database system to capture and maintain data of the beneficiaries. This software will be used on bio-metric enabled tablets.
19. PMU through the Planning Department, Government of Sindh will obtain on-line connectivity with NADRA – National Database Registration Authority to access and verify beneficiary information. If that is not possible then PMU will obtain NADRA connectivity via SBP.
20. PMU will mobilize the communities or engage the platform of the existing VOs in the villages to develop or strengthen the VOs.
21. PMU will develop and organize interest groups based on common value chains, enterprise interests and social collateral.
22. PMU will request the interest group members to form smaller groups based on social collateral (willingness to cross-guarantee) of 5-7 members, in case the interest groups are of more than 10 members.
23. Partner banks will present their product offerings including credit, savings, digital channels, payments and remittances to PMU (including field staff)
24. While PMU collects data from the VO, the banks will engage with insurance companies and undertake preparatory work to develop financial services. This will include:

- a. Designing financial products (programmed lending) for the specific purpose and value chains (we already know the names of most of the value chains of the Project beneficiaries)
 - i. The financial products will be designed based on the cash flow of the farmers
 - ii. Loan disbursement would be in tranches (if required) to match the timing of the cash flow needs of the farmers / fisherfolk
 - iii. Loan repayments would be timed to match the timing of sale proceeds realization by the farmers / fisherfolk
 - iv. Loan period would correspond to the crop cycle or the fishing seasons
- b. The partner banks will establish branchless banking agents in the Project villages. The VO in each village will be made the branchless banking agent, generating revenue for the VO as well. The branchless banking agents will be used for cash-in and cash-out for the bank loan and other purposes by the beneficiaries
- c. PMU will facilitate meeting and connection between banks and insurance companies to agree on the insurance products and its mode of distribution either at the retail or portfolio levels and suitability of the insurance product for the climate risks.

25. The partner banks will submit these financial products designed to PMU and SBP.

Partner Bank Credit Process

26. During the VO or Interest Group (IG) meetings, PMU will communicate to the VO members the broad parameters of financial services to be offered by the Project's partner banks. These terms will include:
- a. Maximum loan amount – PKR 500,000
 - b. Eligible value chains - tomato, paddy, wheat, chilies, purchase of small livestock for rearing and fattening, fisheries for small boats and coastal aquaculture.
 - c. Purpose of financing – purchase of inputs
 - d. Loan Period – 6 months or 1 year
 - e. Interest rate – 10% p.a. for the first cycle, 20% p.a. for the second cycle and rest to be paid by project as subsidy for the borrower to the lending bank
 - f. Maximum Age of Loan Applicant – maximum 58 years
27. PMU will identify the VO members interested in accessing financial services.
28. PMU will register beneficiaries for access to finance using bio-metric enabled tablets. The registration process will be completed at the beneficiary site.
29. PMU will obtain data of the beneficiaries and thumb-print for verification of the data from NADRA (Verysis) and to obtain proof of life of the beneficiaries. The data obtained from NADRA will populate the mandatory fields in the software.
30. The Project staff will further collect the following beneficiary data:
- a. Willingness of the beneficiary to access formal financial services via the project support.
 - b. Details of crop, livestock and fishing activities including assets, income levels, crop, livestock, fisheries expenses (financing requirement), cost and quantity of inputs and sale price and sale quantity to determine the income of the beneficiaries from crop and livestock activities. Other sources of income such as labour wages, non-agricultural

income generating activities, domestic and/or international remittances. The list of the key data points is provided below:

- i. Number of acres owned / rented
 - ii. Types of crops cultivated
 - iii. Number of acres cultivated for each crop
 - iv. Production of each crop in the last season
 - v. Cost of inputs for each crop
 - vi. Quantities of each crop sold
 - vii. Sale price of each crop
 - viii. Number of milching animals
 - ix. Quantity of milk produced daily
 - x. Quantity of milk sold daily
 - xi. Sale price of milk daily
 - xii. Number of small and large animals owned for rearing
 - xiii. Number of animals sold in the last one year
 - xiv. Sale price of animal
 - xv. Number of months of fishing season
 - xvi. Boat size
 - xvii. Number of fisherfolk on the boat
 - xviii. Cost of boat equipment / diesel
 - xix. Quantity sold of each type of catch
 - xx. Sale price of each type of catch
 - xxi. Profit from daily
 - xxii. Any other income – wages / enterprise – amount earned per month on average in the last one year
- c. The types of climate risks encountered in the recent past by the beneficiaries and their impact on their income levels
 - d. Any other data required by the banks
 - e. Names of preferred group members (5-7 members) in the village for the purpose of loan cross-guarantee
 - f. Preferred bank from the list of partner banks
31. The above data of the beneficiaries willing to access formal financial services via Project support will be uploaded in the PMU database.
 32. SBP will have access to the database.
 33. Partner banks will have limited access to PMU database to view and download beneficiary information.
 34. Partner banks selected by the beneficiaries will be allotted only to that particular bank. Other beneficiaries data will be available to all partner banks for client acquisition.

35. Bank staff and the insurance company (if retail level insurance product distribution) will then meet with the group of beneficiaries willing to borrow in each village and share the details of the financial services offered.
36. The beneficiaries will select the banks from which they would prefer to borrow, if not selected before.
37. The selected partner banks will then check the credit information bureau report of the beneficiaries in the database shared by the Project. The banks will utilize the computerized national identity card number of the beneficiaries for this purpose.
38. The bank branch staff will then approach the beneficiaries at the village level to
 - a. Verify the information provided by the Project
 - b. Obtain any additional data required
 - c. Share the details of the financing terms and conditions
 - d. Seek formal agreement of the beneficiaries to borrow from the bank
39. The bank will then process the loan application of the beneficiary within 5 working days.
40. The bank will then communicate with the beneficiaries the credit decision and the disbursement mode.
41. The Bank will disburse the loan either in tranches or in lump sum to the beneficiary depending on the cash flows of the value chain product financed.
42. Loan disbursement could be in cash at the bank branch, deposited into the bank account or digital account of the beneficiary. Digital channel will be the preferred mode.
43. Prior to the date of loan repayment, the Bank will communicate to the beneficiary either via SMS or in-person the repayment date of the loan
44. The beneficiary could deposit the cash for repayment either at the branchless banking agent in the village or via the bank mobile application or at the bank branch.

Reporting Structure

45. Each partner bank will submit to SBP a monthly loan portfolio report electronically (generated from the bank's banking / loan system) by the 5th of the following month to SBP. The report will include the name of village, name and CNIC number of the borrowers in each village, name of value chain for which financing has been provided, date of loan disbursement, the amount of loan disbursed, repayment structure – lumpsum or instalments, date of loan repayment, amount of loan repayment collected on or prior to the date of loan repayment.
46. Each partner bank will submit a portfolio level non-performing loan report including classification of the principal loan amount according to the prevalent Prudential Regulations of SBP.
47. On a quarterly basis, partner banks will submit separate claims SBP on pre-agreed templates for reimbursement of the interest rate subsidy. SBP will reimburse partner banks for the interest subsidy on a quarterly basis. The amount of subsidy will be determined based on the loan portfolio outstanding during the quarter.
48. Each partner bank will submit to SBP quarterly reports on:
 - a. Branchless banking agents established in the PMU targeted villages
 - b. Value and number of transactions along with classification of transactions
 - c. Number of savings bank accounts opened of the beneficiaries

- d. Mobile Phone Accounts: Number of accounts opened and transactions, and the value of transactions by beneficiaries using mobile application or USSD channel
 - e. Number of ATM / debit cards issued by the bank to the beneficiaries and its usage levels
 - f. Details of insurance products (types and number) provided to the beneficiaries through different distribution channels – number of beneficiaries, types of insurance products, sum insured and the premium.
49. SBP will submit to PMU quarterly reports on:
- a. Partner bank-wise disbursements
 - b. Partner bank-wise non-performing loans
 - c. Utilization, investment earnings and balance in interest subsidy account
 - d. Allied financial services and digital channels availability
 - e. Financial products designed by partner banks
50. For interest subsidy, SBP will submit to PMU the fund requirement for the following year by 30th November each year.

Annexure-24: Project Procurement Strategy (PPS).

Project Overview

Country	Islamic Republic of Pakistan
Province	Sindh
Programme Area (as per design)	Three coastal districts (Badin, Sujawal and Thatta) of Sindh Province
Full Project Name	Sindh Coastal Resilience Project (SCRP)
Project ID	2000003511
IFAD Loan amount	USD 100,000,000
Loan Number	TBC

SCRP goal is to reduce poverty and food and nutrition insecurity among rural poor households in a gender, youth, nutrition and climate change sensitive manner. The table 1 below captures the potential big-ticket (strategic) contracts in the first 18 months which have impact on the implementation.

Table 1:

S#	Description	Estimated Value in US\$ (M)
Consulting Services		
1	Implementation Partner(s)	3.00
2	Institutional support to STVETA	1.20
3	Core outcome indicators survey etc.	TBD
4	Hiring of professional staff	1.77
Community Procurement		
1	Tangible Assets (Livestock and Non-livestock)	TBD
Goods		
1	Vehicles	0.133
2	IT equipment, software etc.	0.166
Works		
1	Small infrastructure/canal/ponds etc. works	33

Introduction

Project procurement of goods, works and services under SCRPP will be carried out in accordance with Sindh PPRA Act and Rules thereof, to the extent they are consistent with IFAD Procurement Guidelines, Procurement Handbook and Financing Agreement. PMU will engage the services of a competent Procurement Manager and a Contract Management Officer to assist the PMU in efficient conduct of all procurements. The SPPR 2010 (Rule 5) acknowledges precedence of international obligations like IFIs Financing Agreements to use IFI procurement guidelines and document templates. Government of Sindh, has previously implemented, except IFAD, large numbers of externally funded projects (World Bank, ADB) in various sectors. The PPS presents how procurement activities will support the development objective of the project and deliver the best value for money under a risk-based approach. In addition, the PPS includes the rationales for procurement decisions including the selection of the approach to market and procurement methods. The PPS and the procurement plan of the project will be

regularly updated as deemed appropriate during the project implementation.

Overview of Country, Borrower and Marketplace

Operational Context

Governance Aspects: Pakistan is world's 5th most populous country at 240 million (2022 census) and 33rd largest country area wise at 796,095 sq.km. 63 percent of the population is rural. Pakistan is a lower middle-income country with a per capita GDP of US\$1596, and overall GDP of US\$ 376.53 billion⁷². Agriculture sector contributes 22 percent of the GDP, industry 20 percent and the rest is contributed by the services sector⁷³. Despite its smaller share in the economy, agriculture has a key role in the economy absorbing 42 percent of the labour force and directly and indirectly contributes to 80 percent of the country's exports.

Pakistan's economy with its largely consumption led growth model has experienced frequent boom and bust cycles. COVID-19 put the economy under serious stress during 2019 to 2021. The economy recovered to a six percent growth in 2022 supported by accommodative macroeconomic policies. Growth again declined to less than two percent in 2023 due to high energy prices, persistent high inflation rate, rapid devaluation of rupee, high interest rate (22 percent) and global economic slowdown. Situation was further exacerbated by heavy monsoon rains and flooding in 2022, submerging about 1/3rd of the country and displacing roughly 33 million people and causing heavy damage to crops, livestock and infrastructure totalling around US\$ 16 billion.

Despite achieving significant poverty reduction over the last two decades with 47 million Pakistani's escaping poverty, poverty remains a persistent challenge. Poverty in Pakistan remains concentrated among rural households relying on agriculture. In 2018-19, rural poverty was 43.5 percent, more than twice as high as urban poverty (18.5 percent). Preliminary estimates suggest that as a direct consequence of the floods, the national poverty rate may increase by up to 4 percentage points, potentially pushing around 9 million additional people into poverty⁷⁴.

Political Stability: The political system is in transition since last 24 months with the ousting of previous federal government through a no-confidence motion in 2022, subsequent dissolution of provincial assemblies, followed by number of constitutional petitions on these changes as well as timely conduct of next elections. The next elections are now slated for February 2024. The political changes notwithstanding, sovereign agreements on IFI loans and projects are respected and implemented by the permanent bureaucratic system that is by and large immune to political vagaries and changes.

Sindh Province: Sindh is the second most populous province in Pakistan with a population of 55.7 million⁷⁵ and third largest in terms of area at 140,914 sq.km.

⁷² World Bank, 2022

⁷³ www.Statista.com

⁷⁴ World Bank, 2023

⁷⁵ <https://www.pbs.gov.pk/sites/default/file>

Sindh has the highest concentration of urban population at 49% (country average of 32.5%). Sindh has a well-developed agricultural base supported by an extensive irrigation network on the Indus. Around 14% wheat, 30% rice, 30% sugar cane, 25% cotton and 30% vegetable crops grown in Pakistan are from Sindh. With its 350 km coastline, Sindh has 48 percent share in fish export from Pakistan. Agriculture contributes 24 percent to Sindh GDP and generates 70 percent of the employment. Livestock and fisheries contribute over 50 percent of the agriculture GDP of the province. The poor derive 56 percent of their income from agriculture.⁷⁶ Livestock provides critical income security for many rural households and is of particular importance to women and people lacking clear land tenure rights.⁷⁷

Despite its resource endowments, Sindh is afflicted with large pockets of endemic poverty, particularly in rural areas. While the port city of Karachi and major urban centres are relatively well developed, the rural areas are relatively poorer compared to rural areas in rest of the country in terms of income and consumption poverty, vulnerability and nutrition statistics. Half the districts classify as high deprivation, with districts that were rated as very poor three decades ago continuing to rank as such. In Sindh, about 30-35 percent of the population lives below the poverty line. The prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively and exceed the national averages of 20 percent and 40 percent respectively⁷⁸.

The three SCRP target districts have a population of 3.87 million/697,262 households or 7 percent of the provincial population. The three districts are recognized as the most deprived and under-developed with a multi-dimensional poverty headcount of 84 percent⁷⁹. Of the landowners, 84 percent own less than 25 acres⁸⁰. Small holdings, traditional low input low-output production systems, lack of access to technology, services and financial services, and small and scattered marketable surpluses keep performance of smallholder farming below potential. The three districts are also most affected by extreme climate change events like frequent flooding, droughts, sea intrusion in productive areas and increasing salinity and irrigation water shortages. Coastal fishermen communities are the most deprived in terms of productive assets and social infrastructure/services. 84 percent rural households are landless and work as tenants/sharecroppers and daily wage earners.

Relevant National and Provincial Strategies and Policies:

Agriculture and Rural Development: Ministry of National Food Security and Research is the central policy and coordination body for agriculture sector and food security. National Food Security Policy in place aims to achieve the reduction in poverty, malnutrition, and food insecurity by reaching an average growth of 4% for the agriculture sector. To enhance the agriculture and livestock sectors, the federal government launched a five-year PKR. 309 billion (USD 1.93 billion) National Agriculture Emergency Programme in 2020. The programme provides emergency support (mainly subsidies on inputs) and is being executed with the

⁷⁶ Rana, W. (2019): Creating fiscal space for enhancing public investment in Sindh agriculture sector. PACE policy research paper.

⁷⁷ World Bank (2022): *Pakistan Country Climate and Development Report*. Washington, DC.

⁷⁸ FAO, WFP, WHO, UNICEF (2020): *Pakistan Overview of Food Security and Nutrition*.

⁷⁹ Sindh Districts Profile, P&D Department, Sindh

⁸⁰ Pakistan Bureau of Statistics.

coordination of the provinces to enhance productivity of major crops and improvement of water efficiency. After 18th amendment of the constitution, provinces enjoy full autonomy in agriculture, rural development and social protection-poverty reduction in terms of legislation, regulations, policy making and investments, including loans from IFIs for the sector. Each province, including Sindh, now has policies on various aspects of rural development including agriculture, livestock, fisheries and rural poverty reduction.

Poverty Reduction and Social Protection: Pakistan's poverty reduction efforts are guided by Pakistan Vision 2025, the 12th Five Year Plan 2018-23 and the Poverty Reduction Strategy 2019. The vision 2025 aims to halve the poverty by 2025 and attain upper middle-income status for the country.

Benazir Income Support Programme and National Socio-Economic Registry: Federal Ministry of Poverty Alleviation & Social Safety leads the national effort for poverty reduction and operation of social safety nets for the poor and vulnerable. Its flagship programme, Benazir Income Support Programme is a national social safety net programme that provides unconditional cash transfers (UCT) to over 6 million women from poor families and is one of the largest social safety net program in the world with over US\$ one billion in annual disbursements. To enable the BISP beneficiaries to sustainably graduate out of poverty, government introduced a comprehensive multidimensional poverty reduction strategy in 2019. IFAD, through its National Poverty Graduation Programme, is supporting the government in this endeavour through provision of productive assets and skills combined with interest free loans in 23 poorest districts of all provinces. Government is now in process of institutionalizing the NPGP poverty graduation approach as a regular programme of the Ministry of Poverty Alleviation & Social Safety through initial allocation of Rs. 3 billion in national budget and further supplemented by an Islamic Development Bank loan of US\$ 100 million.

Sindh Poverty Reduction Strategy: Sindh Poverty Reduction Strategy, based on the lessons learned in EU and GoS funded SUCCESS programme implemented in 15 districts, calls for a participatory community driven approach to address key development challenges of survival (water, sanitation, nutrition, shelter and health) and poverty graduation (literacy, vocational skills and enterprise development). The strategy draws lessons from EU funded SUCCESS- Union Council-Based Poverty Reduction Programme that addressed community infrastructure, a Community Investment Fund (for community managed credit provision) and Rural Service Hubs.

Sindh Agriculture Policy 2018-2030: The policy is aimed at achieving 4-5 percent sector growth per annum through policy reform, improved production and productivity, facilitate access of smallholder farmers to productive resources, facilitate access to finance, promote nutrition sensitive agriculture production, encourage sustainable natural resource use, and build coping capacities for resilient climate smart agriculture.

Gender Equality and Women Empowerment Policy 2020-2030: Promulgated and steered by Women Development Department, the policy is aimed at putting in practice the international conventions of gender equality and women empowerment and covers 11 domains including rights of women and girl child, poverty and social protection, health and education, political empowerment, economic empowerment, gender-based violence and environment and climate change.

Programme for Improved Nutrition in Sindh (PINS): Based on an EU funded Euro 90 million initiative in 10 districts, GoS has institutionalized the programme through own budgets to reduce the incidence of malnutrition and stunting among women and children under 5 for province-wide coverage.

Key Relevant Institutions

Federal and Provincial Governments: At Federal level, Economic Affairs Division of Ministry of Finance is the main coordinator for all international development assistance, including IFAD. At Provincial level, Planning & Development Board of GoS, headed by a chairman and supported by Members for key sectors, is the lead provincial development planner as well as coordinator for international development assistance. Sectoral policies, projects and development budgets are implemented by an elaborate and reasonably well capacitated provincial departments headed by Secretaries and supported by Directorates and field staff. Relevant departments for SCRP include P&D Board, Agriculture Department (Extension & Research), Livestock and Fisheries Department and Sindh Technical and Vocational Training Authority.

Civil Society and Rural Support Programmes: Over 500 small and large national and international NGOs and civil society organizations are active in Sindh in areas of poverty alleviation, health, education, charity, post disaster rehabilitation and community development. Majority of them raise funds from public and international charities for their work. Three major rural support programmes, Sindh Rural Support Organization, Thardeep and National Rural Support Programmes, all created through government endowment funding, are actively involved in government and donor funded community driven development activities in almost all districts including SCRP target districts. Collectively, these RSPs have established three tier community organization structures for participatory development and micro-credit activities in entire province. The three RSPs are implementing partners for IFAD-funded NPGP in 23 districts of Sindh Province. Almost all the villages in three target districts have community organizations sponsored by one of three RSPs.

Financial Services Sector: Pakistan, including Sindh, has quite well-developed banking and micro-finance sectors. However, both banks and micro-finance institutions have a pronounced urban and business/commercial lending bias and smallholder farmers and fishermen are outliers in terms of access to affordable credit despite fixing of agri-credit targets by the State Bank each year. Agriculture credit has remained just 5 percent of the private sector credit for many years and a major constraint for the smallholder agriculture in achieving the true production potential. Reasons include collateral requirements, complicated paperwork, lack of branch network and outreach in rural areas and very high interest rates in case of micro-finance institutions. This has forced most farmers to rely on an exploitative middlemen supplied credit who then also acts as buyer of the output on his terms.

International Development Finance Institutions:

A number of international development institutions have long standing partnership with Government of Sindh in rural poverty reduction, social protection, social sector development and agriculture and fisheries development. ADB and World Bank are the two largest DFIs in Sindh province and Pakistan. Both have number of large ongoing development projects in the province. ADB, apart from financing the large climate mitigation infrastructure components in SCRP, financed the first

integrated coastal area development project back in 2010 onwards. ADB is in process of finalizing a Post-Flood Housing and Social Infrastructure Rehabilitation Project. WB is implementing a large Sindh Water and Agriculture Transformation Project (US\$ 310 million), a post flood Housing Reconstruction Project (US\$ 500 million), a post flood Infrastructure Rehabilitation Project and a Sindh Integrated Health and Population Project. EU has a long-standing development partnership with GoS in areas of rural and community development, agriculture diversification and MSME development through SUCCESS, GRASP and PAIDAR projects. UNIDO and FAO have been implementing partners of EU in these projects.

Procurement Regulatory Framework: In Pakistan, the procurement structure is fully devolved into national and sub-national governments. The procurements undertaken by implementing entities in Sindh are nested in the legal structure of Sindh Public Procurement Rules (SPPRA) 2010 (amended 2019) which were initially enunciated in 2009 and were later amended in 2010 and 2019. These rules are to be aligned with sound procurement practices. They provide broad-based policy guidelines for procuring goods, works, and services.

Corruption is a persistent problem in Pakistan, however some actions by the Government such as Assets Recovery Unit, Whistle Blower Laws, and the strengthening of National Accountability Bureau (NAB) and Federal Investigation Agency (FIA) are likely to help in combatting corruption. Procurement activities for the project should be closely supervised and monitored. While the corruption index may have risen, there is a working theory that the corruption has decreased, and the Government's continuous efforts have brought light to fraudulent practices that were previously hidden, hence, the uptick in perceived corruption. This, however, needs detailed research.

Accountability structure: Strict scrutiny by Pakistan's supervision control agencies usually creates high-risk caution among Project Implementation Units (PIUs) and a tendency to refer major decisions to higher authorities for approval. Decision-making and procurement accountability should be included in the Operations Manual.

Economic Aspects: Pakistan's trade deficit has surged to an all-time high of USD 48.66 billion in the outgoing fiscal year, up from USD 30.96 billion a year ago, a significant 57 per cent jump on the back of higher-than-expected imports. The trade deficit reached an alarming level despite a ban on more than 800 non-essential luxury items in May by the government. The Inflation rate in Pakistan is high and volatile. The annual inflation rate in Pakistan accelerated to 20 percent in May 2023. The exchange rate suffers the same fate; however, the exchange rate followed an upward pattern during early 2023. The impact of exchange rate, inflation rate (commodity prices), risk of supply complexity, and procurement lead time will have significant role throughout the project implementation period.

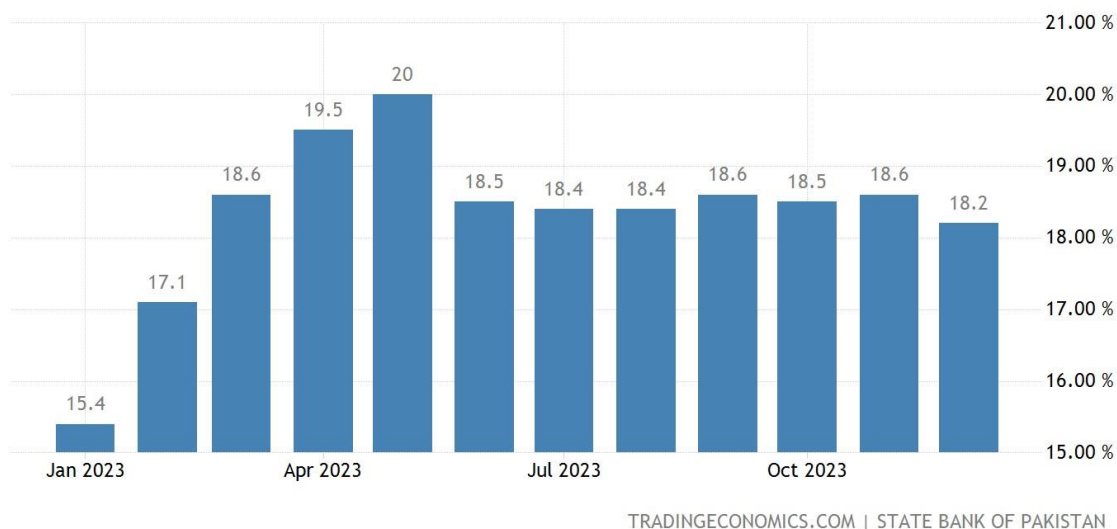


Figure 2: Inflation Rate of Pakistan

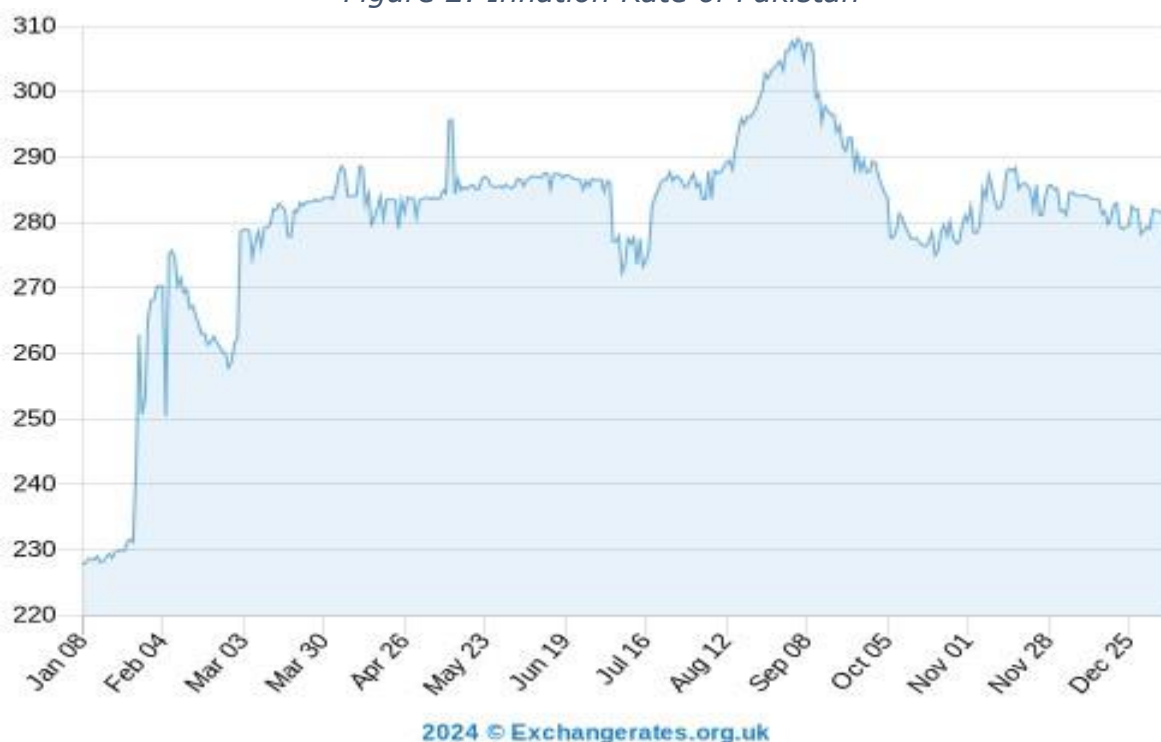


Figure 3: <https://www.exchangerates.org.uk/USD-PKR-exchange-rate-history.html>

Though the freefall of rupee versus dollar has been arrested to large extent however this remains a key risk in every procurement with bidders/ consultants hedging their costs. Stable exchange rate is a very important factor for both imports and exports. Exchange rate volatility creates uncertainty about returns as well as costs. It makes it difficult to negotiate supply contracts for raw materials and even sales because parties have to take on exchange rate risk. Stability in foreign exchange is always a crucial factor for developing countries. Sufficient foreign exchange reserves also play a vital role in designing and implementing foreign policies. Considering the economic status of Pakistan and rapid devaluation

of Pakistani rupee, a price adjustment mechanism needs to be devised in the local contracts allowing to adapt to the devaluation of local currency.

Sustainability Aspects: Government of Sindh is promoting sustainability of the public goods investment leading to its development priorities.

It is expected to observe, during project implementation in the three coastal districts, a demand surge and consequent shortage of the products and increase in price of products and supplies. It should be utilized as an opportunity to promote the local manufacturing and contracting which must lead to development of domestic industry.

Environmental impact and remedies for the supplies and products required for the project should be followed adhering to national/provincial regulations and applicable IFAD policies. The proposed environmental and social category for SCRP is substantial, based on the SECAP screening tool. The SECAP climate risk rating stands as moderate. The project will solicit and adopt cost-effective, structurally sound structures to address natural disasters situations. Revenue streams for maintenance and upkeep of public good structures will be implemented with community participation. In addition, it is likely that COVID-19 will have little impact on the project procurement process, some contingency measures should be put in place considering the unprecedented nature of the virus.

Technological Aspects: Although Pakistan has made considerable strides in the technological advancements, it still has a long way to go. Pakistan's technological prowess leaves much to be desired. The supply of the goods/equipment from the international market, surge in price and longer lead time are the factors which may prompt supply challenges and increase the risk of supply complexity. Efforts should be made to explore technology options available locally particularly for bottleneck items as it will address the issues of exchange rate and uncertainty in price and available quantity.

Most of the technology-oriented products required to be procured under the project will be available either locally or from international market. Internally, although the government department's skills in basic software such as Microsoft Office is satisfactory, however, their grasp on advanced software is theoretical. In addition, the use of mobile apps is envisaged to enter and validate M&E data with links to project and government monitoring portals. In this connection, the users will be trained prior to their engagement. A project website will be designed and developed to disseminate procurement information including procurement plan, procurement notices, invitation to bids, bid documents, and RFPs as issued, summary of evaluation reports, complaints and actions taken, contract award, and performance under the contracts.

Key Conclusions

The external influences that could affect the delivery of the project are the currency exchange rate, price hike as consequence of demand surge and shortage of supplies in both domestic and international market.

The risks of currency exchange rate can be mitigated through appropriate provisions in the procurement documents and contractual terms to ensure that the suppliers do not carry the risk of exchange rate fluctuation. Adequacy of the contractual provisions will reduce the risk of default of suppliers during the currency of the contract arising out of the significant change in the currency exchange rates. Moreover, the risk of exchange rate can also be mitigated through reliance on domestic products and supplies. The risk pertaining to ever increasing

inflation can be mitigated by relying on effective packaging advance contracting to the extent possible. It should be ensured that products available in the domestic market are preferred to the extent possible as long as they meet the requirements and specifications.

Implementing Agency Capability Assessment

An autonomous and empowered Project Management Unit (PMU) at Karachi, administratively linked to P&D Board, and reporting to Project Steering Committee, will be responsible for project planning, coordination, financing, monitoring and procurements. Chairman P&D Board will head the PSC and rest of membership will be drawn from relevant line departments, Finance Department and civil society. A competitively selected Project Director will head the PMU, supported by adequate number of professional and technical support staff including finance, procurement, infrastructure, agri-business development, gender and nutrition and M&E. Annual Workplans and Budgets (AWPB), approved by PSC, shall guide the project implementation and progress reporting.

A District Coordination Unit (DCU) in each of the three target districts, headed by a competitively selected Project Coordinator and supported by a small team of professional and support staff, will be responsible for planning, coordination, monitoring and reporting of project activities based on Project's AWPB. Partner government implementing agencies will nominate dedicated activity managers at provincial and district levels, and specified field level staff, for project related activities. Scope of work of these agencies will emerge from SFO plans and will be used as a basis for MOUs between PMU and implementing agencies. Project will finance necessary operational and input budgets identified in the MOUs for the work related to these agencies. The potential implementing agencies include Agriculture Extension Department, Livestock and Fisheries Department, and STEVTA. Some other private and public sector agencies may emerge as implementing partners on the basis of VO development plans and technical and vocational training activities. PMU will have the freedom to engage them subject to detailed TOR and financial terms duly approved by PSC.

The table 2 below outlines a summary based on a SWOT analysis of the IA.

Table 2:

Strengths	Weaknesses
<ul style="list-style-type: none"> • Institutional maturity • IA follows provincial rules of business and procedures • Proper organizational structure and clear lines of authority • Internal controls are in place. Auditor General of Pakistan conducts regular audits • Familiarity with Sindh procurement regulatory framework, 2010 	<ul style="list-style-type: none"> • IA's procurement capacity/experience of working on IFAD-funded projects is low • Dearth of procurement expertise in the local market • Dearth of specialized technical training providers in the local market • Bidders avoid doing business with the government due to payment delays • The auditors are not fully familiar with IFAD Procurement Regulations and procedures.

Opportunities	Threats
<ul style="list-style-type: none"> • Current government is committed to workforce/skills development • Institutional development of technical /vocational training activities • Strategic approach towards procurement activity will improve the performance • Development of modern training techniques, programs and training centres 	<ul style="list-style-type: none"> • Overall demotivation on the part of provincial bureaucracy due to recent over-involvement of NAB in government affairs • Lack of planning of downstream placements of technically skilled workforce • Frequent transfer/postings of the senior officials • Possibility of low competition in bidding due to volatile exchange rate and pressure on local currency

It is the very first IFAD-funded project in the Sindh province. The implementing agency has never implemented an IFAD funded project in the three coastal districts of Badin, Sujawal and Thatta. The proposed PMU, based in Karachi, may exhibit significant weaknesses in advance planning, preparation of bidding documents, designing of shortlisting/qualification and bid evaluation criteria ensuring bid evaluation quality and contract management issues.

In line with the procurement risk assessment, project procurements under SCRP will be carried out in accordance with Sindh Public Procurement Regulatory Authority (Sindh PPRA) Act and Rules thereof, to the extent they are consistent with IFAD Procurement Guidelines, Procurement Handbook and Financing Agreement. PMU will engage the services of a competent Procurement Manager and Contract Management Officer to assist the PMU in efficient conduct of all procurements. The SPPR 2010 (Rule 5) acknowledges precedence of international obligations like IFIs Financing Agreements to use IFI procurement guidelines and document templates. Government of Sindh, except IFAD, has previously implemented large numbers of externally funded projects (World Bank, ADB) in various sectors.

The Sindh Procurement Rules 2010 amended March 2019 promote the principles of fairness, transparency, value for money, opportunity, economy, and efficiency; stipulate open competition as the default method of procurement, requires preparation of procurement plan, provide for pre-disclosed evaluation criteria, limitation on post bid negotiations, requires disclosure of contract award information, and provides complaint redressal mechanism. Bidding opportunities are required to be advertised and are also essentially advertised on the Sindh Public Procurement Regulatory Authority (SPPRA) website, and national newspapers, as well as procuring agency's website. The SPPR-2010 defines the operational parameters of the Sindh Public Procurement Regulatory Authority including the bidding process (procurement of Works, Goods and Services). The SPPRs provide guidance on complaints management and dispute resolution systems. The relevant rule requires the procuring agencies to establish a grievance redressal committee at senior level and provides a detailed mechanism to resort to grievance redressal if not satisfied with the decision of the grievance committee.

Recognising the lessons learned from other IFAD funded projects in the country, following measures are proposed to strengthen project procurement and contract management functions.

- i) Establish a dedicated procurement unit headed by a Procurement Manager, supported by a contract management officer and a procurement assistant.
- ii) Organize a series of comprehensive capacity building training on IFAD Procurement Handbook/Guidelines, standard procurement documents (SPDs), use of OPEN and CMT.
- iii) Prioritise initiation of procurement process of big-ticket contracts which will speed up the implementation. Advance contracting may be considered in case of the critical packages of consultancy services.
- iv) Performance evaluation and achievement of identified deliverables is a compulsory provision and any shortfall to be followed up for resolution.
- v) Include a Responsibility Matrix in the project implementation manual (PIM).
- vi) Timely notification of procurement committee, consultant selection committee and complaint/grievance redressal committee.
- vii) Internal Audit to closely review procurement performance at all levels.
- viii) Planning of large agricultural inputs procurement in advance of the planting season.
- ix) Deploy IFAD End-to-End Procurement system (OPEN) and its subsequent enhancements.
- x) Project website will have dedicated page for procurement notices, bidding documents and contract award notices.

Market Analysis

The market analysis has been conducted based on the information and market knowledge obtained through meetings with the service providers, visits to the fish market in Karachi, own experience and that of other organizations in the province and internet searches etc.

Porter's Five Forces

Competitive rivalry	Low	Under normal circumstances, the competitive rivalry amongst the prospective suppliers and manufacturers of the supplies and equipment is high, however, considering the demand due to SCRP in the three districts the supply capacity of most of the suppliers might not be enough. Given the opportunities will exist for all the suppliers and
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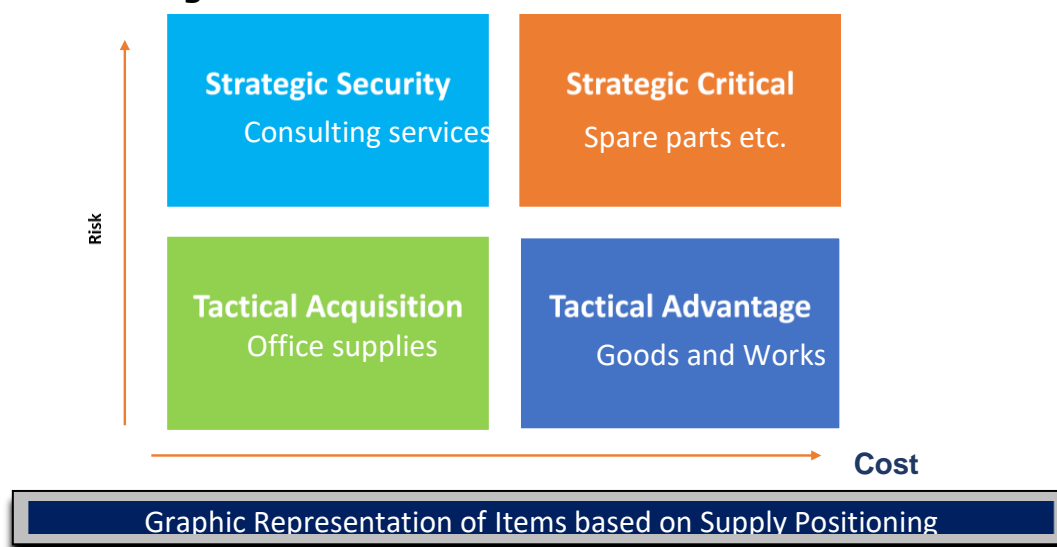
		the competitive rivalry amongst the suppliers should be low.
Bargaining power of buyers	Low	The buyers would have minimum leverage over the terms and conditions of the contracts pertaining to equipment and supplies considering the rising demand of required goods and gap in the demand and supply. The priority of most of the buyers would be to ensure supplies ensuring efficiency and transparency rather than ensuring the availability of products at the lowest cost only.
Bargaining power of suppliers	High	The bargaining power of the suppliers would be high given the geographical location of the target area and specialised nature of the required commodities. From the buyer's point of view, the solicitation for the products and supplies would be able to attract the interest of the supplier only when it will include swift modalities for payments such as including provisions for advance based on contemporary trend in the market, shorten period of payment on delivery, provisions such as documentary credit and others to safeguard risk of the suppliers.
Risk of new entrants	Low	It is expected that the new entrants will become part of the market during the period of peak demand and many of the firms and individuals in associated business may start producing the supplies and products needed in the three districts. However, there will also be the challenge of substandard commodities/products. In order to address the challenge of substandard products either from new entrant or existing suppliers facing the pressure of growing demand, it will require continuous monitoring to ensure commodities/products meets the specifications and requirements.
Risk of substitutes	High	Considering the high demand of the commodity/product and supplies, it is possible that buyers may face shortage of some of the items. It is, therefore, required that substitutes either the sources or products should be identified while arranging the product and supplies. The buyers shall have contingency plan to mitigate the scarcity of items.

Key Conclusions

Considering the situation, volatility and the expected response of the market, it may be assessed that the PMU may face low response to solicitation from suppliers, low bargaining power of the buyers and high leverage for the suppliers, risk of substandard products and need for identification of alternate products and suppliers. The PMU may have to go an extra mile than the normal circumstances

to acquire products and supplies required for the communities. In order to address these risks, the buyers shall ensure that the solicitation for the product and supplies is prepared in consonance with the contemporary market trends and should be able to attract the interest of the suppliers by including the provisions that may complement the convenience of the supplier in the contracts. The terms of payments, method and period of payment, conditions for delivery should be as per convenience of the supplier if the market continued this trend of high demand and limited supply by the time proposed project will be implemented.

Supply Positioning



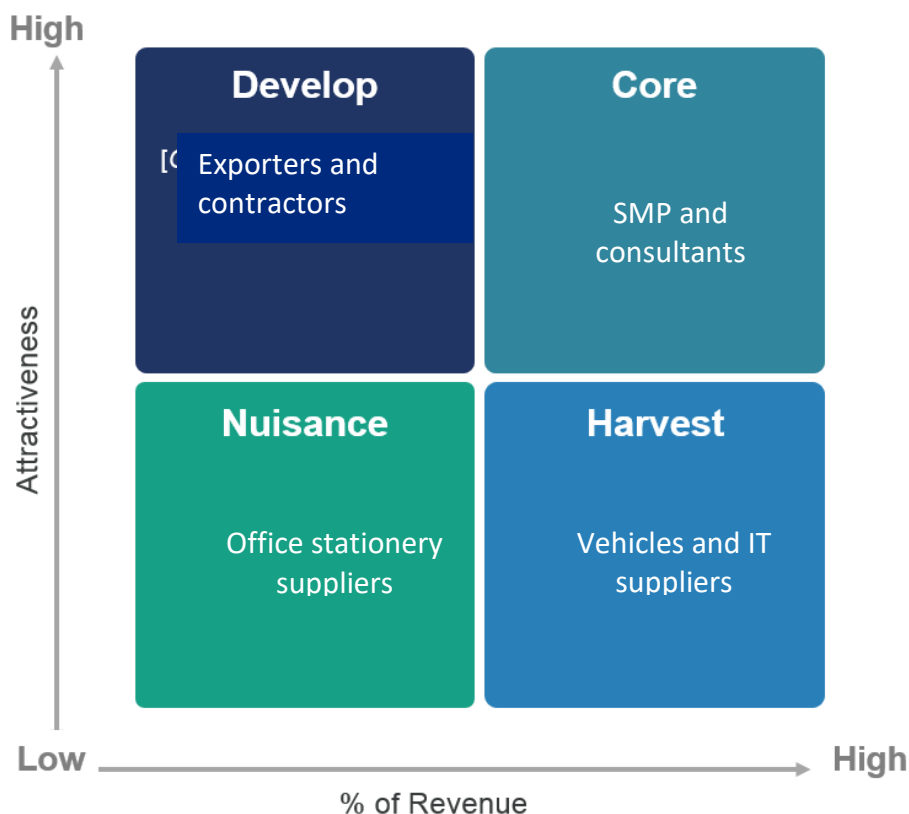
The strategy to manage the items under different supply group shall be as under.

Supply Group	Management Strategy
Tactical Acquisition	Ensure Supply from multiple sources without significant consideration to cost.
Tactical Advantage	Ensure supply and exploit purchasing power and minimize cost.
Strategic Security	Ensure supply of the items so that intervention for preparedness do not compromise.
Strategic Critical	Form partnerships and engage concerned government departments to ensure supply, quantity and quality of the products for successful intervention.

Key Conclusions

The supply position analysis reveals that the risk is low for procurement of items under tactical acquisition. The PMU will have to put in place a strategy for items falling under the category of strategic security. The supply complexity will be low for items under the category of tactical advantage. However, the big-ticket contracts fall under the category of strategic critical where the PMU will develop a detailed procurement strategy and ensure healthy competition among the potential bidders.

Supplier Preferencing



Graphic Representation of Items for Supplier Preferencing

The strategy to manage the items under different supply group shall be as under.

Supply Group	Management Strategy
Nuisance	Give low attention to suppliers of these items and seek price at Purchaser's terms.
Harvest	Give importance to the supplier of these items to seek best price out of the multiple suppliers.
Develop	Give importance to ensure suppliers respond to solicitation of Purchaser and give consideration to the terms of the Supplier to acquire products.
Core	Maintain close liaison and interaction to ensure supply of these items and pay importance to terms and conditions of suppliers to ensure supply.

Key Conclusions

The suppliers for agriculture and fisheries related inputs may get into collusive practices. There will be a need to pay more attention to the Develop and Core categories. The prospective suppliers for the items falling under the category of Nuisance and Harvest in the supplier preferencing shall be pursued to get the best prices for the items. The solicitation and procurement documents shall ensure the interest of the Purchaser to get the best value for money.

Market analysis of construction sector

The purpose of the market analysis is to develop an appropriate understanding of the relevant market sectors and their operational structures regarding the project implementation.

In Pakistan, the construction/engineering industry is regulated by the Pakistan Engineering Council (PEC). All national engineers, consultants and constructors/operators (individuals and companies) are required to be registered with the PEC to be eligible to do business in Pakistan. However, the international Consultants and Constructors/Operators are required to register their firms with the PEC upon award of a contract. There are several categories of registration and licenses which are linked with the allowable bidding and contract execution capacity of a firm.

Over 10,000 firms are registered with the Pakistan Engineering Council as constructors/operators. However, only ~100 (1%) of them holds the CA category (no limit) license and High Carbon Steel Technology (HCS), which enables them to be on the prequalifying list of approved constructors. Generally, material cost constitutes a major portion of the cost for construction companies followed by salaries and wages of both technical staff and labour. The basic construction materials like cement and steel are available in abundance locally. The market research also brought to light the most common reason for delays in construction projects.

Table 3:

S#	Cause of Delay	Category of Delay	Responsibility
1	Change orders or directives	Contract related	Employer
2	Labor productivity issues	Labor related	Contractor
3	Poor site management and supervision	Management/administrative	Contractor
4	Inspections/ Audits	Construction site related	Contractor
5	Poor cost estimation and control	Management/administrative	Contractor

The delays caused due to lengthy internal approvals and slow budget releases are often attributed to the Employers. Any changes in design or orders could delay or even halt the construction activity altogether. Availability of skilled labor is also an issue for the contractor, especially in rural areas. The second

most deteriorating reason for any project is poor cost estimation and management. After design-related delays, unavailability of funds is the most crucial element. Subcontracted or third-party contractors are also a major element. Their profitability is not directly tied towards the project or contract, hence delays in respect of subcontractors or third-party related work are more frequent.

Although time and cost overruns are very common in construction projects, these can be reduced or eliminated by adopting a proper performance monitoring mechanism and control system that will be integrated with all the key aspects and activities of each phase of the construction project. Better communication among all the stakeholders of the projects with a clear understanding of the project success criteria and KPI leads to the successful and timely completion of the project without time and cost overruns ensuring quality.

Indicative List of Contractors

Table 4:

S #	Name of Contractor	Experience	Country
1	M/s DESCON Engineering Company Limited	>30 years	Pakistan
2	M/s Sinotec Co. Ltd	>20 years	China
3	M/s China Harbour Engineering	>20 years	China
4	M/s Ramzan & Sons	>35 years	Pakistan
5	M/s JSC Trust Hydromontazh	>20 years	Russia
6	M/s Sardar Muhammad Ashraf D. Baloch (Pvt) Ltd.	>40 years	Pakistan
7	M/s AIQ & Co.	>40 years	Pakistan
8	M/s M/s Hafiz Rabnawaz & Company	>25 years	Pakistan
9	M/s Sachal Engineering Works	>30 years	Pakistan
10	M/s Power China	>35 years	China
11	M/S Shahrukh Engineers & Contractors	>25 years	Pakistan
12	M/s Ghulam Rasool & Company	>30 years	Pakistan
13	M/S QALANDAR BUX ABRO & Co.	>30 years	Pakistan
14	Karachi Shipyard & Engineering Works Ltd	>30 years	Pakistan

Market Analysis of Consulting Industry

Civil Society and Rural Support Programmes: Over 500 small and large national and international NGOs and civil society organizations are active in Sindh in areas of poverty alleviation, health, education, charity, post disaster rehabilitation and community development. Majority of them raise funds from public and international charities for their work. Three major rural support programmes, **Sindh Rural Support Organization, Thardeep and National Rural Support Programmes**, all created through government endowment funding, are actively involved in government and donor funded community driven development activities in almost all districts including SCRP target districts. Collectively, these RSPs have established three tier community organization structures for participatory development and micro-credit activities in entire province. **The three RSPs are implementing partners for IFAD-funded NPGP** in 23 districts of Sindh Province. Almost all the villages in three target districts have community organizations sponsored by one of three RSPs.

Engineering Consulting: The Pakistan Engineering Council registers the consulting firms under different heads. Each consultant is required to maintain their active registration with PEC enabling them to practice in Pakistan. The international consulting firms are required to get registration as soon as they secure a contract in Pakistan. The process of securing PEC registration for consulting services is smooth. However, for funded-projects the PEC registration is not considered as an eligibility requirement and firms cannot be denied shortlisting in absence of PEC registration. There is a professional entity representing engineering consulting firms namely Association of Consulting Engineers, Pakistan (ACEP). The ACEP is quite active in coordination with donor agencies.

Indicative List of Consulting Firms

Table 5:

S #	Name	Address
1	M/s Management Development Centre (MDC)	C-35, G.E.C.H Society Qasimabad, Hyderabad, Pakistan. Ph No. 022-2652290
2	M/s. A.A Associates	245-2Y, Block-6, PECHS, Off Sharah e Faisal, Karachi. Ph. 021-34539884
3	M/s. National Development Consultant (Pvt) Limited	28-M, Mader-e-Millat Road, Quaid-e-Azam Industrial Estate, Lahore-54760, Ph. 042-35215942-46
4	M/s Engineering Consultants International (Pvt) Ltd.	29, Block 7/8, Darul Aman Housing Society, Shahrah e Faisal, Karachi, Ph. 021-34542290
5	M/s. Mott McDonald	22 Station Road Cambridge CB1 2JD United Kingdom

		T +44 (0)1223 463500 F +44 (0)1223 461007 mottmac.com
6	M/s Techno Consultant International	37-K/6 PECHS, Karachi. Ph. 021-34530630-2
7	M/s NESPAK	4 th Floor, NICL Building, Abbasi Shaeed Road, Off Shahrah e Faisal, Karachi, Ph. 021-99225430-33
8	M/s E.A Consulting (Pvt) Ltd.	AL-19, 15 th Lane, Khayaban-e-Hilal, Phase-VII, Defense Housing Authority, Karachi, UAN-111-111-584
9	M/s DONG IL Engineering Consultants	Republic of Korea
10	M/s Osmani & Company (Pvt) Ltd.	Osmani House. 245/2K, Block-6, PECHS Karachi. Ph. 021-34546541-42
11	M/s ACE Consultants	Office # 502, 5th Floor, Gohar Chamber Plot No. A/2, Survey Sheet No. 35P/1, Survey No. SNCC-8 Block 7 & 8, K.C. H. S Union Ltd. Karachi, Sindh, Pakistan Ph: + 92 21 32361455 Email: ahmed.habeeb@consultace.com
12	M/s Korea Engineer Consultants Corporation (KECC),	Republic of Korea
13	M/s SMEC International PTY Limited, Australia	Australia
14	M/s Temelsu International Engineering Services Inc. Turkey Turkey	Turkey Yildizevler 721. Sokak No. 6 06550 Cankaya, Ankara Turkey Tel: +90 312 442 47 20 (pbx) E-mail: temelsu@temelsu.com.tr
15	M/s Tumaz Engineering Company	Turkey
16	M/s National Development Consultants (Pvt) Ltd. Pakistan	DHA, Phase VIII, Lahore, Pakistan

Market Analysis of Goods Industry

The PMU will be based in Karachi. The three coastal districts of the project are closely located to Karachi. Industry contributes a large portion of Karachi's economy, with the city home to several of Pakistan's largest companies dealing in textiles, cement, steel, heavy machinery, chemicals, and food products. The city is home to approximately 30 percent of Pakistan's manufacturing sector, and produces approximately 42 percent of Pakistan's value added in large scale manufacturing. At least 4500 industrial units form Karachi's formal industrial economy. Karachi Export Processing Zone, SITE, Korangi, Northern Bypass Industrial Zone, Bin Qasim and North Karachi serve as large industrial estates in Karachi. The Karachi Expo Centre also complements Karachi's industrial economy by hosting regional and international exhibitions.

Table below encapsulates the industrial zones based in Karachi.

Table 6:

Name of Estate	Location
SITE Karachi	SITE Town
Korangi Industrial Area	Korangi Town
Landhi Industrial Area	Landhi Town
North Karachi Industrial Area	New Karachi Town
Federal B Industrial Area	Gulberg Town
Korangi Creek Industrial Park	Korangi Creek Cantonment
Bin Qasim Industrial Zone	Bin Qasim Town
Karachi Export Processing Zone	Landhi Town
Pakistan Textile City	Bin Qasim Town
West Wharf Industrial Area	Keamari Town
SITE Super Highway Phase-I	Super Highway
SITE Super Highway Phase-II	Super Highway

Source: (https://en.wikipedia.org/wiki/Economy_of_Karachi)

List of firms for Goods (Agriculture Machinery and Equipment)

Table 7:

Sr. No.	Name of firm	Address
1	M/s AgroAsia Tractors	Office # 15, 20 , 32 & 33, 2nd Floor, Al-Hafiz Centre, Rampart Row, Adamjee Dawood Road, Karachi, Pakistan
2	M/s Astro International (Pvt) Ltd.	302, Shahrah-e-Faisal, Karachi
3	M/s Insaf Food Industries	G-7, Al-Rehman Square, Plot # 16, Main jamal-ud-din Afghani Road, Karachi Pakistan.
4	M/s Kolachee International.	C-79, S.i.t.e, Karachi, Pakistan Ph: (92 21) 32560390 32560391
5	M/s Rice Lab Pakistan (Pvt) Ltd M/s Burhani Agri Trading	504, ibrahim trade tower, main shahrah-e-faisal, Karachi
6	M/s AWK Commodities (Abdul Wali Khan Group)	Suite #314, Industrial Town Plaza, Shara-e-Liaqat, Karachi
7	M/s Al-ghazi Tractors	Off, Plot No. 102-B, 16th East Street, Main Korangi Rd, Karachi, 75500
8	M/s Millat Tractors	Address: Garden Town, Shershah Road, Multan Cantt. Punjab, Pakistan Tel: +92 61 653 737 1

9	M/s Arsala Sea Foods	7-B, 2 nd Floor Sattar Chambers, West Wharf, Karachi +92 3002660965
10	Pakistan Fisheries Exporters Association	Mr. M Zafar Kundi, Chairman 7-B, 2 nd Floor Sattar Chambers, West Wharf, Karachi Sec.pakfea@gmail.com +92 21 32330521 +92 21 32330520
11	M/s Mekran Fisheries (Pvt) Ltd	Karachi Fish Harbour, West Wharf, Karachi
12	M/s Pakistan Fisheries Ltd	Karachi Fish Harbour, West Wharf, Karachi
13	M/s Shah Sons Fisheries (Pvt) Ltd	Karachi Fish Harbour, West Wharf, Karachi
14	M/s Spectrum Fisheries (Pvt) Ltd	Karachi Fish Harbour, West Wharf, Karachi
15	M/s People Fisheries (Pvt) Ltd	Karachi Fish Harbour, West Wharf, Karachi

List of Information Technology Services firms

Table 8:

S #	Name of firm	Address
1	M/s Digi Trends	digitrends.co
2	M/s Digital Bhaijaan Networks	Workshop bus stop Tando Jam district, Hyderabad, Pakistan
3	M/s EY Forde Rhodes	Progressive Plaza, 601 Beaumont Rd, Civil Lines, Karachi, Karachi City, Sindh
4	M/s Avanza	Office # 14-B, Fakhri Trade Centre SR 6/10, Karachi, 74200
5	M/s Ibex	ibex Tower, Plot # 5, Block B SMCHS, Adjacent FTC Building Shahrah-e-Faisal, Block B Sindhi Muslim CHS (SMCHS), Karachi, Karachi City, Sindh
6	M/s XL Technologies	Alam Road, opposite Defence Park, Defence Housing Society Defence, Hyderabad, Sindh 71000

List of local firms for General Supplies/ Equipment/ Maintenance

Table 9:

S #	Name of firm	Address
1	M/s Zamzam Enterprises	Hyderabad, Pakistan
2	M/s The Expert	Islamabad, Pakistan
3	M/s MMS General Suppliers	Hyderabad, Pakistan

4	M/s Khurram Enterprises	Plot L, 25/1 Street 3, FB Indus-Area Block 21 Block 21 Gulberg Town, Karachi.
5	M/s PRD	Sindh University Employees Cooperative Housing Society, Jamshoro
6	M/s Interwood	GR Floor, Muhammadi Towers, Nasim Nagar Road, Qasimabad. Hyderabad
7	M/s Spirit Industries.	Gulberg 3 Lahore Punjab 54000 Pakistan 0092 - 042 - 35760481
8	M/s Z-TECH Solutions	B-79, Liaqat Town, Tando Jam, Hyderabad, Sindh
9	M/s Asfand Traders	Head Office #: 401, 4 th floor Mariyam heights Plot C-11 Block-7/ 8 K.C.H.S Shakra-e-Faisal, Karachi, Sindh

Procurement Trends

Generally, public procurement accounts for almost 15-20% of the GDP. Therefore, it is of paramount importance to acknowledge the significance of strengthening public procurement systems as a tool to achieve concrete and sustainable results, build effective institutions, and gain substantial savings in the use of scarce public resources. Public procurement has a strategic function as a mechanism for supporting economic development, conserving and making optimum use of resources through application of sustainable criteria, and increasing job creation and private sector growth including enhanced participation of small and medium enterprises in a country. Government expenditure through public procurement has long been used as a means of stimulating growth at all levels (national, regional, and local), including accomplishing the government’s vision and mission.

The Government of Sindh has progressively undertaken various initiatives in reforming its public procurement system during the past many years. The SPPRA has the mandate to regulate the public procurement of goods, works and services activity at the provincial level.

SPPRA is closely coordinating with the World Bank as well as federal PPRA to put in place a sustainable system of e-procurement at the provincial level. The e-procurement would enable contractors/suppliers to submit bids electronically leading to greater transparency and efficiency in the procurement process. The system would further ensure efficiency, economy as well as improved quality of goods and services procured.

Procurement Risk Analysis for abovementioned contract/group of similar contracts

Procurement risks for the big-ticket contracts (goods, works and consulting services) include ensure designing of right specifications/scope of work, calculation of realistic cost estimates, lack of participation of bidders additional to the market players, availability of institutional capacity for implementation and sustainability, and desired awareness of IFAD’s Procurement Handbook/Guidelines and SPDs.

Procurement Type	Risks	Mitigation Measures
Works Contracts	<ul style="list-style-type: none"> ➤ Very small works not preferred by the good contractors ➤ Lack of regular and effective supervision ➤ Higher transportation cost to remote areas ➤ High cost of construction materials ➤ Security issues for outsiders 	<ul style="list-style-type: none"> ✓ Packaging of works contracts to attract the contractors. Or engage the local contractors with strict performance standards and monitoring. ✓ Engage community elders for parallel monitoring. ✓ Use local suppliers for construction materials ✓ Engage local administration and keep them informed.
Goods Contracts	<ul style="list-style-type: none"> ➤ Lack of proper need assessment and market/options analysis ➤ Suppliers do not prefer delivery at the dispersed destinations far from the main area. ➤ Local business lack capacity to make full supply. ➤ Latest variety of input material is not available locally. ➤ Lack of advance planning for cropping/fishing seasons. 	<ul style="list-style-type: none"> ✓ Conduct detailed needs assessment, market/options analysis. ✓ Conduct proper due diligence and cost-benefit analysis of various options available. ✓ A centrally located warehouse may be arranged as storage facility to ensure goods are delivered in time, without implementation delays. ✓ Use framework agreements with multiple suppliers. ✓ Create awareness on cropping/fishing seasons through social and mainstream media.
Consultancy Services Contracts	<ul style="list-style-type: none"> ➤ Uncertainty in getting adequate expertise in various fields ➤ Challenges in preparing comprehensive TORs (input 	<ul style="list-style-type: none"> ✓ Detailed internal discussion and external communication with other IFAD funded project staff to prepare comprehensive TORs to ensure selection

	<p>requirements) and preparing realistic cost estimates.</p> <ul style="list-style-type: none"> ➤ Regional collusion leading to limited competition 	<p>of qualified service providers</p> <ul style="list-style-type: none"> ✓ Develop a realistic shortlisting and evaluation criteria ✓ Engage technical resource person or seek technical support from IFAD for the shortlisting and technical evaluation of the proposals.
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SECAP Risks Associated with Procurement Matrix

Environmental and Social Safeguards			
Biodiversity conservation	Risk Rating	Consequence	Guidance for Project
1.8 Could the project involve or lead to procurement through primary suppliers of natural resource materials?	Moderate	Moderate Project may require procurement of natural resources through secondary suppliers.	No major construction work is envisaged. However, depending on the type of construction contract, the PMU will ensure incorporation of adequate requirement as part of the bidding document. These provisions do not need to be incorporated for those types of construction work or activities where it is not feasible to obtain nor identify sources of materials in remote rural locations.
Resource Efficiency and Pollution Prevention	Risk Rating	Consequence	Guidance for Project
2.6 Could the project involve inputs of fertilizers and other modifying agents?	Moderate	Minor The project requires use of fertilizers, but options are available to replace polluting fertilizers with alternatives.	Project to include in the bidding document a list of approved/certified chemicals which is prepared based on existing national/provincial regulations.
2.7 Could the project involve or lead to procurement, supply	Moderate	Moderate	Project to include in the technical specifications the

and/or result in the use of pesticides on crops, livestock, aquaculture or forestry?		The project requires use of pesticides, but options are available to replace potentially polluting pesticides with alternatives.	use of approved pesticides and respect WHO-FAO codes for safe labelling, packaging, handling, storage, application and disposals of pesticides. Incorporate the list of approved/certified pesticides in the bidding document. The list of approved/certified would be based on existing national / provincial regulations.
Cultural Heritage	Risk Rating	Consequence	Guidance for Project
3.1 Could the project be located in areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage?	Low	Minor The project is not located in an area that is considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage	If required, the project will include a requirement for bidder qualifications previous experience in carrying out works in areas that have cultural heritage. Include contract clauses on safeguards to protect chance finds.
Labour and Working Conditions	Risk Rating	Consequence	Guidance for Project
5.1 Could the project operate in sectors or value chains that are characterized by working conditions that do not meet national labour laws or international commitments? (Note: this may include discriminatory practices, high gender inequality and the lack of equal opportunities, denial of freedom of association and collective bargaining, labour migrants)	Moderate	Moderate The project operates in sectors or value chains that have, in the past, not met national labour laws, or international commitments, but is now adequately regulated. However, international value chains are not regularly audited for environmental or social performance.	Project to include an eligibility, qualification requirement or a self-declaration that the bidder does not have any previous convictions for infringement of labour laws. Contract conditions to include in respect of ILO core labour standards (no child or forced labour; equal opportunity, non-discrimination and freedom of association). Provisions to be incorporated for all

			procurement packages and contracts.
5.4 Could the project: (a) operate in a sector, area or value chain where producers and other agricultural workers are typically exposed to significant occupational and safety risks, and/or (b) promote or use technologies or practices that pose occupational safety and health (OSH) risks for farmers, other rural workers or rural populations in general? (Note: OSH risks in agriculture might include: dangerous machinery and tools; hazardous chemicals; toxic or allergenic agents; carcinogenic substances or agents; parasitic diseases; transmissible animal diseases; confined spaces; ergonomic hazards; extreme temperatures; and contact with dangerous and poisonous animals, reptiles and insects. Psychosocial hazards might include violence and harassment.)	Moderate	Moderate The project operates in a sector, area, or value chain where workers are occasionally exposed to significant OSH risks, and where regulation is known to be weak or non-existent.	Project to include contract clauses for OSH measures to protect project's workers from injury, illness or impacts encountered in the workplace or while working to be included contract provision Bid evaluation criteria to objectively quantify contractors with a high-quality Health and Safety Management Plan (HSMP) be introduced as applicable for specific value chain actors based on assessed risk factors and exposure.
Community Health, Safety and Security	Risk Rating	Consequence	Guidance for Project
6.7 Could the project lead to the potential for gender-based violence, including sexual harassment, exploitation and abuse, as a result of labour influx, land redistribution, or other actions that alter community dynamics?	Low	Minor Moderate changes to community dynamics may result in increased potential for gender-based violence or sexual exploitation. Gender-based violence interventions are integrated into project design	Ensure that compliance with IFAD's policy on preventing and responding to sexual harassment, exploitation and sexual abuse and mandatory references to security policies will be included in procurement documents and concluded contracts. IFAD self-certification checklist and provision would be included in the bidding document.
6.8 Could the project lead to increases in traffic or alteration in traffic flow?	Moderate	Minor The project will result in minor increases to traffic volume. Only	Applicable traffic rules and road safety measures in the rural road network will need to be adhered to and road

		minor increase in risk of injury or death.	signs installed as needed according to the national regulations.
Physical and economic resettlement	Risk Rating	Consequence	Guidance for Project
7.4 Could the project result in impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	Moderate	Minor The project may result in some impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights. Legal recourse and other forms of arbitration/conflict resolution are available.	Not applicable, The project seeks positive impacts on land access. No expropriation is planned.
Financial Intermediaries and direct investments	Risk Rating	Consequence	Guidance for Project
8.1 Could the investment be granted to an institution that does not have an environmental and social policies and an associated environmental and social management system (ESMS) in place (transparent, publicly available)?	Moderate	Moderate The institution does not have an ESMS in place, but several individual E&S policies. The policies are therefore not considered as transparent. The reporting on E&S is available upon request.	Detailed ESMS (Environment, Social and Governance Management System) consistent with IFAD standard 8. Incorporate validation as part of due diligence exercise prior to approval of FI's selection. Provision in PIM for FIs
8.2 Could the investment be granted to an institution with insufficient capacities (i.e. unqualified personnel e.g. ES Officer) to implement the ESMS?	Moderate	Moderate The institution does not employ an ES Officer, but has sufficiently trained field staff available to monitor the impact of the operations of the institution.	FI must have ES Officer, and field staff to implement the ESMS. Project ES specialist to provide support and oversight to and potential hire additional consultants to support implementation, monitoring and reporting.

Procurement Objective for abovementioned contract/group of similar contracts(related to the 5 Rs)

- ✓ Ensure timely and efficient availability of goods, works and services in accordance with the agreed Procurement Framework/Guidelines with a view to achieve value for money through adequate and healthy competition and timely completion of contracts.
- ✓ Confirm to the greatest extent possible the selection of qualified suppliers/contractors/consultants with good track record in implementation and SECAP concerns. and that the goods, works and services procured under the project are of the best possible quality standard available.
- ✓ Place the risk with party best able to manage the risk and minimizing risk of supplier/contractor/consultant failure and/or incompetence.

Recommended Project Procurement Approach

Procurement Plan indicates the financial thresholds, procurement methods/bidding procedures and identifies those contracts which shall be subject to the IFAD’s mandatory Prior Review as well as Post review.

Consultancy Services Contracts

Attribute	Selected arrangement	Justification Summary/Logic
Specifications (SECAP compliance)	Conformance	When used on TA/advisory role, SECAP requirements to be adopted for final report, which has implications for downstream procurement.
Sustainability Requirements	Yes	Sustainability will be a mandatory requirement for any procurement carried out in this project.
Contract Type	A. Traditional	Most of the consultancy contracts will follow the traditional method
Pricing and costing mechanism	A. Lump Sum B. Time based	Most of the consultancy contracts will have lump sum contracts. However, any of the two contracts may be used suiting to the requirements.

Supplier Relationship	A. /Collaborative	Collaborative relationship will apply in all contracts with the service providers.
Price Adjustments	A. Yes, where applicable B. Negotiated	Both Fixed Price and negotiated contracts approaches will be used. Price adjustments to be invoked for long term contracts. The consultant and the Client to agree on the modality of increase as per the negotiated contract.
Form of Contract (Terms and Conditions)	D. State any special conditions of contract	Replacement of team at contract implementation stage not allowed except under exceptional circumstances e.g. death. Long term contracts, exceeding 12 months, each replacement will require Client's approval. Frequent replacements may lead to suspension and termination. Payment of any output will be based on review and acceptance by the Client.
Selection Arrangement	A. Commercial Practices B. United Nations (UN) Agencies C. Government agencies on single source D. Single source	Selection arrangements will be based on standard commercials practices.

Market Approach	<p>A. Type of Competition</p> <ol style="list-style-type: none"> 1. Open 2. Limited 3. National 5. No Competition - Direct Selection <p>B. Number of Envelopes/Stages</p> <ol style="list-style-type: none"> 1. Two Envelopes 3. Single Stage 4. Multistage <p>C. Negotiations (Yes)</p>	<p>National competition</p> <p>In exceptional cases of small value (remote areas or continuation of a previous assignment) direct selection may also be used.</p>
Pre / Post Qualification	<p>A. Pre-Qualification</p> <p>B. Post-Qualification</p> <p>C. Initial Selection (limited tendering)</p>	<p>Shortlisting (pre-qualification) applies to all the cases.</p>
Consultant Selection & Evaluation Method	<p>A. Quality and Cost Based Selection (QCBS)</p> <p>B. Fixed Budget Based Selection (FBS)</p> <p>C. Least Cost Based Selection (LCS)</p> <p>D. Quality Based Selection (QBS)</p> <p>E. Consultant's Qualifications Based Selection (CQS)</p> <p>D. Direct Selection</p>	<p>All these are acceptable</p>
Evaluation of Costs	<p>A. Adjusted Bid Price (after negotiations)</p>	<p>Applicable</p>
<ul style="list-style-type: none"> • Domestic Preference 	<p>No</p>	<p>No</p>
<ul style="list-style-type: none"> • Rated Criteria 	<p>List the type of criteria to be used (mandatory/desired)</p>	<p>Highest combined score for QCBS. Highest technical score within budget (FBS). Ranking of lowest price proposal (LCS). Though QBS is allowed, it is not generally required/used for rural development projects.</p>

<p>Government official (serving/retired/resigned) as part of consultancy team</p>		<p>If the proposed consultant is a government official, IFAD may agree on a case-by-case basis to the hiring of a government official of the Government under consulting contracts in the Borrower/Recipient country, either as an individual or as a member of the team of experts proposed by a consulting firm, only when:</p> <ul style="list-style-type: none"> a) the services of the government official of the Borrower Government are of a unique and exceptional nature, or his/her participation is critical to project implementation; b) his/her hiring would not create a conflict of interest; c) his/her hiring does not conflict with any laws, regulations, or policies of the Government; and d) he/she is on an unpaid leave of absence granted by the current government employer. <p>The contract of the concerned government official (proposed consultant) with its government employer needs to have ended (resigned or retired) or has been halted for the duration of the assignment and an official letter from its current employer to this</p>
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		effect must be submitted.
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Goods Contracts

Attribute	Selected arrangement	Justification Summary/Logic
Specifications (SECAP compliance)	Conformance	For agricultural inputs (seeds/plant materials) all the materials should qualify the required standards set by the Government. In case of pesticides, no prohibited pesticides to be procured.
Sustainability Requirements	Yes	Sustainability should always be considered in all procurement activities.
Contract Type	A. Traditional	The standard traditional contract applies to these procurements of goods.
Pricing and costing mechanism	A. Fixed Price	Fixed pricing serves well in most of the procurement of goods for the project
Supplier Relationship	A. Collaborative	Collaborative relationships work well where suppliers agree on the delivery and payment terms.
Price Adjustments	A. None (Fixed Price)	Fixed prices will apply to procurement of goods as no negotiations are allowed for procurement of goods.
Form of Contract (Terms and Conditions)	D. State any special conditions of contract	Payment terms to be in line with delivery, commissioning, installation, and functioning of the goods.
Selection Method	A. Requests for Bids (RFB) B. Requests for Quotations (RFQ) C. Direct Selection	Most of the procurements will go through RFB to ensure healthy open competition among a wide range of competitors. Need assessment to be done and technical specifications in a range (not exact leading to a particular brand/model). Conduct effective market research/survey. Direct selection only for very low value consumables for office

		equipment OR where only one Supplier is available in the local market OR where the prices of a given goods/material/commodity are regulated by the government on regular basis.
Selection Arrangement	A. Commercial Practices B. Framework Agreements/LTA	All applicable
Market Approach	A. Type of Competition 1. Open 2. Advertised RFQ 3. Direct contracting (for low value) B. Number of Envelopes/Stages 1. Single stage one envelope 2. Single stage two envelopes C. Negotiations (No)	Most of these tenders are open to encourage competition amongst suppliers in the market Single stage One envelope will be used for procurement of goods. Negotiations are not allowed for procurement of goods.
Pre / Post Qualification	A. Post-Qualification	Post-qualification will be used for supplier's eligibility, qualification in terms of experience and financial soundness.
Evaluation of Costs	A. Bid Price (exclusive of taxes) B. Life-Cycle Costs	Bid price (compliant to specifications) without taxes to be used for bid comparisons. Life cycle costing to be considered for capital assets like machinery (for processing of agriculture and fishing related products)
<ul style="list-style-type: none"> Domestic Preference 	No	Not Applicable
<ul style="list-style-type: none"> Rated Criteria 	Mandatory	Best evaluated price substantially responsive to the requirements.

Works Contracts

Attribute	Selected arrangement	Justification Summary/Logic
Specifications (SECAP compliance)	Conformance	<p>SECAP compliance requirements to be adhered:</p> <ul style="list-style-type: none"> i) No child labour to be employed ii) Strict oversight for structural stability iii) Mitigation of OSH risks by following statutory legal requirements iv) Making available rest sheds for workers v) Deployment of skilled labour to operate heavy machinery.
Sustainability Requirements	Yes	Sustainability should always be ensured in all procurement activities.
Contract Type	A. Traditional	Most of the works' contracts follow the normal conditions of the contract. These provide guidance on rights and obligations of the two parties and are easy to manage.
Pricing and costing mechanism	A. Schedule of Rates/Admeasurement B Percentage basis (when detailed BoQ is not feasible)	These two methods are applicable and can be used in the pricing and cost mechanism of these contracts.
Supplier Relationship	A. Collaborative	According to the conditions of the contract. Effective communication between the two parties is the key to the timely

		completion of the contract.
Price Adjustments	A. None (Fixed price)	Fixed Price generally applies or Admeasurement price for small variations authorized depending on the duration of the contract.
Form of Contract (Terms and Conditions)	D. State any special conditions of contract	Include SECAP compliance requirements clearly.
Selection Method	A. Request for Bids (RFB) B. Requests for Quotations (RFQ)	Either of the two may be used depending on the requirements and value for money.
Selection Arrangement	A. Commercial Practices	In some instances, the market provides the best option.
Market Approach	A. Type of Competition 1. Advertised RFB/RFQ B. Number of Envelopes/Stages 1. Single stage one envelope C. Negotiations	Depending on the financial thresholds, either of the two methods with single stage one envelope (1S1E) bidding procedure may be used. Negotiations are not allowed.
Pre / Post Qualification	B. Post-Qualification	Post qualification of the contractors will be done for these simple contracts.
Evaluation of Costs	A. Adjusted Bid Price (corrected for a bidder's minor deviations)	Adjusted bid price is the appropriate method. Before award, bidder will have to accept the corrected price.
• Domestic Preference	No	All bidders are domestic. Interest from international bidders is not expected due to small packages.
• Rated Criteria	List the type of criteria to be used (mandatory)	Lowest Price on BoQ or Lowest Evaluated cost.
Debriefing	Preferred	Debriefing will be conducted after contract award for the unsuccessful bidders. Debriefing will be limited to the discussion on the

		bid of the relevant bidder. Other bids will not be discussed with the irrelevant bidder.
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Engagement of Government agencies

Project will engage service of one or more professional social mobilization partners, with proven capacity and track record in organizing rural communities, value chain development planning and poverty graduation. SMP, with assistance from field staff of Agriculture Department and Livestock & Fisheries Department, and under the supervision of PMU's sector specialists, will identify the target villages in three districts as per project selection criteria, organize the Village Organizations and identify and organize interest Groups and develop business plans for identified groups and commodities. An initial target community and commodity profiling, demonstrating community eligibility in terms of project targeting criteria and value chain development potential, will be submitted by BDP to the PMU for approval. Each Plan will be of three years duration or 6 cropping cycles. The development plan will in first stage will address the existing challenges of sub-optimal production, lack of aggregation, middlemen dependence for inputs and marketing, weak extension support, climate vulnerability and climate adaptation, quality assurance and value addition. In case of agriculture, livestock and fisheries interest groups, the business plan will demonstrate net incremental income of US\$ 200 per member by end of the term. The SMP will continue to provide support and oversight for the business plan implementation for 36 months or till the breakeven point of business plan, whichever is earlier.

The project may engage the SMPs either through Memorandum of Understanding (MOU) or through Memorandum of Agreement (MOA). It is a form of contractual arrangement entered between the borrower and a party or parties of special legal status like a ministry, state agency, UN agencies or other international organizations. The MOA specifies the exact service outputs to be delivered, the delivery schedule and stipulates the corresponding service fees and payments over a specified period of time.

Initial engagement and extension will be subject to IFAD prior review irrespective of value and must be supported with a strong justification why entering into a MOU/MOA with the designated entity represents the best option and best value for money for the project compared to a competitive procurement process.

Contract Management

At the very outset, the scope of procurement must be conveyed unambiguously and understood clearly that procurement actions do not end when the contract or purchase order is signed. The contractual obligations are to be followed up systematically till the intended results are achieved as a result of procurement and cessation of all legal obligations as per the provisions of the contract with the parties.

In respect of Goods, first requirement is to ensure timely delivery of goods as per the technical specifications by the supplier after issuance of purchase order to the supplier. The installation and smooth working of the goods as per the intended requirements is to be ensured. In case of any shortcomings during the course of contract administration, the supplier is to be informed about the need for fixing the item in a timely fashion as per the warranties, as the case may be.

For consultancy services, the contract management acquires importance as any delay in achievement of deliverables as per the timeline agreed, impact the project implementation. As per the Responsibility Matrix of PMU Staff (as included in PIM) the contracts to be closely monitored for satisfactory performance and occurrence of any force majeure conditions. Each payment to the consultancy services should be properly validated against the contract provisions and deviations should be communicated to the party, in writing. If unsatisfactory performance continues, appropriate actions to be initiated with strict adherence to the contract. In consultancy contracts, replacement of team members should not be authorized within 12 months except under extraneous or medical conditions. Frequent change of staff with or without justification should be viewed as non-performance and action to be initiated for reduction in management cost and/or suspension/termination of contracts following due process.

For Works contracts, it is important have a contract management plan in place. Employer to issue notices to correct to the contractor in time. The payment claims (IPCs) received from the contractor should be given proper attention. The correspondence received from the contractor always require proper attention and timely response. Any unnecessary delay in this regard may lead to some useless and unending arguments/correspondence with the contractor leading to additional claims and extension of time. During the defect notification period, the contractor must be made aware of the defects and be advised to correct the defects immediately.

Utmost efforts should be made to resolve the disputes related to the contract through mutual consultation. Dispute resolution should be given priority. Arbitration process should be preferred in case the unresolved disputes persist. All contractors should sign an undertaking that without exhausting the arbitration procedures, no judicial recourse would be initiated. The results of arbitration will be subject to judicial review.

Should there be any amendment/extension to be approved, these should be taken up sufficiently in advance keeping in view the expiry date of the contracts. The ex post facto amendment or extension of expired contracts should be strongly discouraged.

Procurement Audit

Procurement accounts for a major portion of activities under a project. It plays very critical role in successful project implementation which highly depends on an appropriate process that describes how the public resources should be managed until the closure of the contract, to obtain project objectives. The procurement cycle includes planning, designing of general specifications, preparation of engineering/cost estimates, preparation of evaluation and qualification criteria and

procurement documents based on identification of risks, constraints, assumptions and selection of suppliers/technical assistance/consultancy services in accordance with the evaluation and qualification criteria.

Usually, internal and external audits are conducted. Procurement audit is basically a method in project management that formally evaluates the performance of the procurement processes being practiced. It is also used to create a record that can be used to shape up and streamline the procurement practices of the organization. It involves a structured review that stems from the procurement planning process going through various stages throughout the procurement cycle. The lapses and instances of noncompliance are identified and reported for future activities and to strengthen the internal controls.

It is important to appreciate the significance of the checking the desired capacity, qualification and experience of the internal audit team to be deployed for the procurement audit function. The procurement audit observations and the management responses to resolve these should be submitted to IFAD and placed before the Project Management Committee or Project Steering Committee, as the case may be. The procurement audit is to be conducted every 12 months by an independent internal auditor.

Procurement Capacity Development

The procurement unit in the PMU will be headed by a procurement manager. There will be a contract management officer and a procurement assistant as team members. The TORs for these positions will include specific experience and skills requirements along with relevant qualification requirement. It will be ensured that all the staff fulfilling desired experience, qualification and skill requirements are hired by PMU. The SPPRA has taken lead in capacity building. In addition to on-site and off-site trainings by the SPPRA, it has also signed memorandums of understanding with five reputable educational institutions, which are currently providing trainings to the master trainers. To increase the demand of these trainings and to lower procurement risk, the SPPRA issued instructions, in April 2017, that after October 2017, only officials certified in public procurement can partake in procurement activities. Since September 2018, it is offering an online certificate program free of cost.

The capacity development plan of the procurement staff will include the following:

- i) The procurement manager, contract management officer, and the procurement assistant will be nominated to attend training program organized by SPPRA.
- ii) ITC/ILO has a project procurement training programme (Blend of online and offline), BUILDPROC. BUILDPROC is a capacity-building programme in procurement for agricultural and rural development. The cost of the programme would be borne by the project resources. To retain the talent, the PMU may specify minimum number of years of service to be completed, beyond certification.
- iii) IFAD Pakistan country office will conduct additional need-based training programmes on end-to-end procurement (OPEN) and Contract

Monitoring Tool (CMT) through its staff and/or accredited procurement consultant.

Procurement Supervision Plan

IFAD will field an annual supervision mission to the project and the IFAD Procurement Specialist, as the mission member, *inter alia*, will (i) review the procurement contracting and implementation processes and timeliness and appropriateness of procurement actions; (ii) assess contract administration and management procedures and review the completeness and updated nature of contract data in the Contract Monitoring Tool; (iii) determine whether adequate systems are in place for procurement planning, implementation and monitoring, and whether procurement documentation and records (including securities) are maintained as per required standards and can be relied upon.

In addition to the annual Supervision Mission, IFAD Pakistan country office will also organise a startup workshop within 2 months from entry into force. On need basis additional specific ad-hoc support missions may be fielded by IFAD.

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 9: Integrated Project Risk Matrix (IPRM)

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

Overall Summary

Risk Category / Subcategory	Inherent risk	Residual risk
Country Context	Substantial	Substantial
<i>Fragility and Security</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Macroeconomic</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Governance</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Political Commitment</i>	<i>Moderate</i>	<i>Moderate</i>
Sector Strategies and Policies	Moderate	Moderate
<i>Policy Development and Implementation</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Policy alignment</i>	<i>Moderate</i>	<i>Moderate</i>
Environment and Climate Context	Substantial	Substantial
<i>Project vulnerability to climate change impacts</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project vulnerability to environmental conditions</i>	<i>Substantial</i>	<i>Substantial</i>
Project Scope	Moderate	Moderate
<i>Technical Soundness</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Project Relevance</i>	<i>Moderate</i>	<i>Moderate</i>
Institutional Capacity for Implementation and Sustainability	Substantial	Substantial
<i>Monitoring and Evaluation Arrangements</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Implementation Arrangements</i>	<i>Substantial</i>	<i>Moderate</i>
Project Financial Management	High	High
<i>Project External Audit</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Accounting and Financial Reporting</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Internal Controls</i>	<i>High</i>	<i>High</i>
<i>Project Funds Flow/Disbursement Arrangements</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Budgeting</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Organization and Staffing</i>	<i>High</i>	<i>Substantial</i>
Project Procurement	Substantial	Substantial
<i>A.1 Legal, Regulatory and Policy Framework</i>	<i>Moderate</i>	<i>Moderate</i>
<i>A.2 Institutional Framework and Management Capacity</i>	<i>Moderate</i>	<i>Moderate</i>
<i>A.3 Accountability, Integrity and Transparency of the Public Procurement System</i>	<i>Moderate</i>	<i>Moderate</i>
<i>A.4 Public Procurement Operations and Market Practices.</i>	<i>Substantial</i>	<i>Substantial</i>
<i>B.1 Assessment of Project Complexity</i>	<i>Substantial</i>	<i>Substantial</i>
<i>B.2 Assesment of Implementing Agency Capacity</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Procurement Overall</i>	<i>Substantial</i>	<i>Substantial</i>
Environment, Social and Climate Impact	Substantial	Moderate
<i>Vulnerability of target populations and ecosystems to climate variability and hazards</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Greenhouse Gas Emissions</i>	<i>Low</i>	<i>Low</i>
<i>Physical and Economic Resettlement</i>	<i>Moderate</i>	<i>Low</i>
<i>Community health, safety and security</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Labour and Working Conditions</i>	<i>Moderate</i>	<i>Moderate</i>

Risk Category / Subcategory	Inherent risk	Residual risk
<i>Indigenous People</i>	<i>Low</i>	<i>Low</i>
<i>Cultural Heritage</i>	<i>Low</i>	<i>Low</i>
<i>Resource Efficiency and Pollution Prevention</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Biodiversity Conservation</i>	<i>Moderate</i>	<i>Moderate</i>
Stakeholders	Moderate	Moderate
<i>Stakeholder Grievances</i>	<i>Low</i>	<i>Low</i>
<i>Stakeholder Engagement/Coordination</i>	<i>Moderate</i>	<i>Moderate</i>
Overall	Substantial	Substantial

Country Context	Substantial	Substantial
<i>Fragility and Security</i>	<i>Substantial</i>	<i>Substantial</i>
<p>Risk:</p> <p>Pakistan's security environment has improved and security situation in the Sindh province is generally stable but remains unpredictable in view of the recent surge in terrorist-related incidents in other provinces (KP and Balochistan) along the border of Afghanistan. Street crimes are common in the capital city of Karachi. A number of UN agencies including UNDP, UNICEF, ILO, WFP, FAO and UNHCR and WHO and WB and ADB are present in the province. Staff of the foreign aid agencies and diplomats are free to travel to and within the province. The country is one of the most affected countries in terms of climate change, and the likelihood of a calamity in the project area during the project implementation are high. More details are presented in the respective sections.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>The situation will be continuously monitored and appropriate mitigation measures will be put in place if deterioration of security in the province and any project district emerges. UNDSS advisory will be followed. The provincial government security advisories will be used for timely and informed input to the project teams and IFAD Missions to ensure their smooth and safe travel to the project areas. Security: UNDSS advisory will be followed and government security advisories will be used for districts with substantial risks. Additionally, experience of IFAD indicates that engagement of local service provider for social mobilisation, participatory approach and strong involvement of community networks provide opportunities for offsetting security risks to great extent. The project includes a RED Component to ensure concrete mitigation measure in case a calamity happens. The infrastructure will be climate-proofed to increase its resilience capacity.</p>		
<i>Macroeconomic</i>	<i>Substantial</i>	<i>Substantial</i>
<p>Risk:</p> <p>The country's worsening macroeconomic situation due to high fiscal and current account deficits and low levels of reserves, continued devaluation of national currency and increasing inflation is leading to decline in household incomes and employment opportunities for poor HH. Additionally, the tightening of fiscal management due to latest standby arrangement with IMF, may pose challenges for availability of counterpart funding.</p>	Substantial	Substantial

<p>Mitigations:</p> <p>The project will mitigate the effects of the macroeconomic situation on the target population with a strong focus on poverty reduction through assets accumulation, strengthening of value chains and provision of skill trainings to rural youth for gainful employment within developing value chains and in wider labour market. During the implementation IFAD and executing agency will ensure; (i) continued relevance of project to needs of beneficiaries and government's priorities; (ii) timely projections to determine counterpart, and (iii) regular monitoring of disbursements. Unit costs and budgets for each activity will be annually reviewed and adjusted by PSC to ensure that budgets reflect the prevailing market prices. At MTR, a holistic review will be carried out in terms of relevance and impact to effect necessary adjustments.</p>		
<p>Governance</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Risk:</p> <p>After the 18th amendment to the constitution in 2008 almost all key sectors related to IFAD's mandate and its administrative and fiscal responsibility are now provincial subjects. However, provinces still face challenges in the development of a strong system for the delivery of development priorities in an efficient, equitable and transparent manner and through participatory development approaches. Weak institutional capacity of public service providers and financial constraints often result in sub-optimal performance.</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Mitigations:</p> <p>The Government of Sindh is committed to poverty reduction and agricultural development as evidenced by recent promulgation of Provincial Poverty Reduction Strategy.</p> <p>The project will assist the GoS in addressing management and technical capacity gaps for improved and demand-based service delivery to the poor with focus on participation of communities and private sector in service delivery.</p> <p>The project will particularly enhance capacity to respond to need for climate change risk reduction and to respond to the changing demand for technologies for agriculture and market demand based vocational skills development and employability of youth and women.</p> <p>The existence of a network of community organisations in the province, engagement of private service providers for social mobilisation and participatory development approach of the project will provide opportunities for inclusiveness, equity and transparency. The project will be strengthening; (i) local community institutions to take ownership of project outcomes and to liaise with the district authorities for continued support; and use community procurement mechanisms to enhance accountability and transparency using social capital.</p> <p>The PMU will be autonomous and empowered with full complement of competitively selected technical experts to offset the impact of Governance issues in regular departments and facilitate dialogue with relevant authorities.</p>		
<p>Political Commitment</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Risk:</p> <p>Recent elections for national and provincial assemblies have resulted in a fractured mandate at national level while same party has returned with clear majority in Sindh provincial assembly. The project approach and focus on the poorest rural people is well aligned with manifesto and political priorities of the winning party in Sindh province. A transition phase will now ensue from a caretaker set-up to the new government which may create a degree of uncertain approval progress.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>IFAD will continuously monitor the evolving socio-political situation for prompt adjustments, if required. After any national or provincial Government change, a meeting or mission will be conducted to introduce the project to the new authorities and analyse any need of adjustment to adapt to any new development strategy</p>		
<p>Sector Strategies and Policies</p>	<p>Moderate</p>	<p>Moderate</p>

Policy Development and Implementation	Moderate	Moderate
<p>Risk:</p> <p>Recognising its increased responsibilities after the 18th constitutional amendment, the provincial government formulated policies for youth, women empowerment, and agriculture. However, there are limited capacities for the execution of policies including concrete actions, associating reforms and strategies and regulatory frameworks etc., leading to deferred benefits to communities and project beneficiaries.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>The project will provide support for effective implementation of the relevant parts of the policies including the associating strategies, frameworks and capacity building. The project shall focus on generating new, simple, and replicable approaches for policy implementation— working collaboratively with all key stakeholders. This will ensure that the successful approaches become visible and generate a strong traction for a wider adoption and implementation by the provincial government.</p>		
Policy alignment	Moderate	Moderate
<p>Risk:</p> <p>Many sectorial policies and programmes at federal and provincial level are ending during the project period and new ones may appear.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>Generally, foreign funded projects and commitments are not affected with the change in government. Every successive government have supported social protection and poverty reduction programmes (BISP). Pakistan was one of the first countries to endorse SDG in 2015 and adopted SDGs as the national development agenda through parliamentary approval. IFAD's past and on-going projects and programmes have supported and will support government priorities notably for poverty reduction and agriculture development. The project is well aligned with the federal and provincial government policies and priorities and relevant SDGs. The lessons learnt of the project will be used to inform the policy dialogue at portfolio level to increase the alignment between the project and the new policies and strategies.</p>		
Environment and Climate Context	Substantial	Substantial
Project vulnerability to climate change impacts	Substantial	Substantial
<p>Risk:</p> <p>In a semiarid environment, project areas are experiencing flooding, cyclones and heat waves due to climate change. The frequency and intensity of extreme climate events is projected to increase, increasing disaster risk particularly for vulnerable poor and minority groups. Income earned from agricultural, livestock and fishing activities form the core livelihoods of the target groups which depend on weather patterns and climatic events. At the same time, awareness and adaptation capacity of the communities is limited.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>The project components are designed to (i) to make value chains less vulnerable to climate change (C1) and (ii) encourage livelihood diversification (2). Building the capacity of vulnerable target groups to diversify activities through investments in new/alternate means of income generation is a key subcomponent of the project. The vulnerable groups (small holders, interest groups, women, poor, and young people) will adapt new skills through capacity building and inputs to increase their incomes. ADB infrastructure aiming at restoring ecosystem services will directly contribute to reduce climate vulnerability of communities.</p>		

Project vulnerability to environmental conditions	Substantial	Substantial
<p>Risk:</p> <p>The Project area is faced with environmental degradation due to excessive Indus river water withdrawal upstream and limited or no drainage facilities due to malfunctioning of existing drainage system. Soil salinization and poor groundwater quality are widespread while ecosystem degradation of the Indus Delta due to water cycle disruption, pollution and sea intrusion in the coastal areas are also contributing factors.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>Project's component 1 is designed to mitigate the impacts of prevailing and anticipated environmental conditions. This includes transition to crops and production practices that are better suited and resilient to prevailing and anticipated future environmental risks. Resources are made available to improve irrigation efficiencies, provide backup supply through storage ponds and improve on-farm drainage in waterlogged areas. The project components are designed to encourage adoption of best agricultural practices suiting and improving the prevailing environment through climate smart agriculture, but also develop economic opportunities in degraded environment. New activities envisaged for vulnerable target groups will contribute to adoption of more sustainable practices (such as production of compost, biopesticides). Alignment with ADB infrastructure will increase the financing available to mitigate the risk that environmental conditions impact project's investments.</p>		
Project Scope	Moderate	Moderate
Technical Soundness	Moderate	Moderate
<p>Risk:</p> <p>The key potential risks that can be foreseen at this stage is the very weak resource and productive asset base of beneficiaries that could allow introduction of business-oriented approaches leading to value chain development. The low literacy rate may further complicate the adoption of the proposed capacity building interventions.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>The project design adopts an incremental approach to improved production and productivity in existing production systems through technology, access to finance and aggregation for strengthened bargaining position of smallholder farmers and fisherfolk. Once economies of scale are achieved, then VOs will be assisted to enter into 4P arrangements. The project will aim to create an enabling environment through capacity building, productive assets accumulation, social and productive infrastructure, financial services and capacity building, for business orientation and private sector involvement. The project design will be kept simple in terms of number, type and range of activities as well as the implementation arrangements.</p>		
Project Relevance	Moderate	Moderate
<p>Risk:</p> <p>Currently insufficient scope exists for smallholder farmers and fishermen to compete in the market. The key challenge and risk is the very weak resource and poor assets base and capacities of the intended target group to participate in the value chain development. There is mismatch between demand and supply of skilled workforce in local labour market and TVET institutes are unable to respond to the demand owing to disconnect between the skills and curriculum offered and delivered and actual market demand.</p>	Moderate	Moderate

<p>Mitigations:</p> <p>The project approach and proposed interventions are based on analysis of contextual conditions of the target group and market. The project scope, approach and proposed activities were identified in consultation with the provincial governments and discussions with fishing and agriculture communities. The project design builds on evidence-based lessons from IFAD (SPPAP and ETI-GB) and other donor-financed projects and programmes. The project objectives will be pursued by addressing the critical issues of assets accumulation, financial services and capacity building.</p> <p>The project will provide an opportunity for realizing the dividends of the “youth bulge” in terms of addressing critical challenges related to human capital development. The project will specifically focus on youth employability for employment and self-employment/entrepreneurship in agriculture including fisheries and livestock and other rural enterprises.</p> <p>The institutional and technical capacity gaps of TVET sector will be addressed by engaging with TVET institutions in private sector.</p>		
<p>Institutional Capacity for Implementation and Sustainability</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Monitoring and Evaluation Arrangements</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Risk:</p> <p>Owing to skills and capacity constraints, the M&E systems may not be well-positioned to track performance in terms of outcomes and results and instead focus on outputs, thereby contributing to the project delivery risk.</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Mitigations:</p> <p>An M&E system, with adequate human capacity and tools, will be developed to provide project management, the Government and IFAD with reliable and timely information on project execution performance and results and to ensure efficient and effective project implementation.</p> <p>Key element of the M&E system will be disaggregated poverty graduation tracking, changes in incomes and asset base, food security and nutrition, climate adaptation and resilience, youth and women empowerment through participatory monitoring and evaluation. BISP PSC data will be used as a benchmark to track the progress of poverty graduation and income and asset changes of beneficiaries.</p> <p>Provisions will be made for a strong M&E team within the PCU and their capacity building.</p>		
<p>Implementation Arrangements</p>	<p>Substantial</p>	<p>Moderate</p>
<p>Risk:</p> <p>Inherent institutional capacity risks are moderate in the province. However, start up delays are common and technical capacity and the skills level of public service delivery institutions may pose a challenge for the implementation of the projects approaches and interventions.</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Mitigations:</p> <p>Relevant government line departments and private sector service providers present in the project area have previous reasonable exposure to participatory development approaches. Some of existing capacity gaps in extension services will be addressed by the project to enable effective engagement.</p> <p>Project management responsibilities will be assigned to an autonomous and empowered PMU, reporting to the Project Steering Committee headed by Chairperson, Planning and Development Board that will be responsible for policy level guidance, coordination, oversight, progress review and will take corrective actions where warranted.</p> <p>IFAD will continue to monitor the situation and work with GoS to develop solutions if implementation arrangements appear insufficient.</p> <p>To mitigate the risk of start-up delays, assistance will be provided for the formulation of the PC-I (government project document), parallel to the finalization of the project design. The IFAD country team will provide frequent implementation support in the initial stage of the project. Additionally, adequate resources will be provided for capacity building and additional technical assistance.</p>		

<p>Risk:</p> <p>Inherent institutional capacity risks are moderate in the province. However, start up delays are common and technical capacity and the skills level of public service delivery institutions may pose a challenge for the implementation of the projects approaches and interventions.</p>	Moderate	Low
<p>Mitigations:</p> <p>Relevant government line departments and private sector service providers present in the project area are reasonably well placed in terms of management and technical capacities and exposure to participatory development approaches. Project management responsibilities will be assigned to Sindh Coastal Development Authority (SCDA), reporting to the Project Steering Committee headed by Chairperson, Planning and Development Board and will be responsible for policy level guidance, coordination, oversight, progress review and will take corrective actions where warranted. SCDA has prior experience of implementing donor funded projects/programmes. IFAD will continue to monitor the situation and work with GoS to develop solutions if implementation arrangements appear insufficient. To mitigate the risk of start-up delays, assistance will be provided for the formulation of the PC-I (government project document), parallel to the finalization of the project design. The IFAD country team will provide frequent implementation support in the initial stage of the project. Additionally, adequate resources will be provided for capacity building.</p>		
<p>Project Financial Management</p>	High	High
<p>Project External Audit</p>	Substantial	Substantial
<p>Risk:</p> <ul style="list-style-type: none"> • IFAD notes persistent gaps with reference to external auditing of projects which include weak-follow up with audit office resulting in backlog of audit findings, non-resolution of audit findings—which could potentially create ineligible expenditure for the project. • Audit may not be required of key sub-recipients of IFAD Financing; hence, Partner Organizations may not submit annual audit reports to the PMUs. This may weaken the levels of assurance over project funds. 	Substantial	Substantial
<p>Mitigations:</p> <p>PMU will be guided by IFAD to:</p> <ul style="list-style-type: none"> • Engage with Director General Audit for timely completion of audit. • Send scanned copies of the final audit report as soon the report is ready to ensure on-time submission to IFAD and to avoid delays resulting from mail services. Then the hard copy can follow to IFAD ICO in Islamabad. • Settle Audit observations within four (4) months after the Audit Report has been shared with project executing agency to ensure early resolution at Departmental Accounts Committee level. • Ensure follow up meetings with the Auditors to settle any unsettled audit findings from previous years. • Ensure engagement of reputable Chartered Accountant Firm, with IFAD concurrence, for the audit of NGOs and/or any partner organizations. 		
<p>Project Accounting and Financial Reporting</p>	Substantial	Substantial
<p>Risk:</p> <ul style="list-style-type: none"> • Accounting software may not be adequately sophisticated or customized to meet project reporting requirements. This may result in difficulties to automatically generate required reports from the system, consolidate reports across multiple financing instruments, implementing layers and levels and report on multiple currencies. • Weak monitoring of physical and financial progress may result in difficulty to track implementation progress and gaps and to take prompt remedial actions. • Project financial procedures in the PIM may lack enough details to provide guidance to the project staff and may not be updated as at when required. 	Substantial	Substantial

<p>Mitigations:</p> <ul style="list-style-type: none"> • An appropriate Accounting Software will be procured, installed and the finance team trained in its use. Financial reports should be auto generated from the procured accounting software. • Integration of the service providers, expenditures in the PMU accounting software. Relevant procedures to be identified in the PIM. The finalization and approval of the PIM Designated Accounts for the project will be opened within eight (8) weeks of the date of signing of the Financing Agreement and will be a condition for disbursement of the initial advance. • PMU shall submit to IFAD; Quarterly Interim Financial Reports within 30-day of period end, annual unaudited financial statements within 4-month of year end and annual audited Financial Statements within 6-month of year end. • FM staff should be orientated to comply with IFAD's requirements in their work—including those relating to IFAD's Anti-corruption policy. The acquisition of the software including staff training will be part of the start-up activities. 		
<p>Project Internal Controls</p>	High	High
<p>Risk:</p> <ul style="list-style-type: none"> • Instances of non-compliance with applicable internal controls have been reported by the Auditor General of Pakistan in recent audit reports, as well as in supervision & implementation support missions. • Absence of internal audit function at project management and lower levels of implementation may pose internal control risks. • Contracts and MoUs with implementing partners may not include key clauses on internal controls and reporting requirements. • Inadequate supporting documentation to justify expenditure especially around asset management, travel expenses, and vehicle fuelling and maintenance, raising the risk of ineligible expenditure. • Weak segregation of duties may arise to high numbers of staff vacancy. 	High	High
<p>Mitigations:</p> <ul style="list-style-type: none"> • To effectively safeguard project resources, the Office of the Auditor General will be engaged to perform compliance verifications on key project activities and the PMU would also engage the new internal audit function set up by WB/GoP to perform IA for all IFAD projects. • A few internal control measures will be implemented to mitigate risks of internal controls failure such as <ul style="list-style-type: none"> o monthly bank reconciliation. o budgetary controls over each transaction. o budget vs actual analysis and reporting to PSC. o maintenance of Fixed Asset Registers and verification of assets randomly/periodically. o complete documentation of activities especially at the beneficiary level and random/periodic inspection to test credibility of reporting by implementing partners. Details will be provided in the PIM. • Supervision missions would specifically examine whether the project is in full compliance with these internal control requirements. 		
<p>Project Funds Flow/Disbursement Arrangements</p>	Substantial	Substantial
<p>Risk:</p> <ul style="list-style-type: none"> • Sub-optimal disbursement may occur because of delays in the start-up of projects arising from delays in opening bank accounts and fulfilment of the other disbursement conditions. • There may be weakness around traceability of interventions at the beneficiary level. • There is weak capacity at lower levels of implementation such as at the community organizations (COs), beneficiary groups and other sub-national partner organizations (POs). Oversight and monitoring of these organizations by the project management may be ineffective. 	Substantial	Substantial

<p>Mitigations:</p> <ul style="list-style-type: none"> • A clear and streamlined process of flow of funds for IFAD financing. As per the arrangements, a special designated account for loan disbursement and a separate account for management of government counterpart funds are established with the National Bank of Pakistan (government owned and a subsidiary of State Bank of Pakistan) to provide independent drawing facility. • Designated Accounts for the project will be opened within eight (8) weeks of the date of signing of the Financing Agreement and will be a condition for disbursement of the initial advance. • Counterpart Fund requirements shall be clearly established through timely preparation and approval of AWPB (latest by 15 April of each financial year- before the start of preparation of the government budget and Annual Development Programme process. The AWPB counterpart fund requirements shall be reflected in the provincial Annual Development Programme and budget. • The project will utilize IFAD's technical guidance note on co-financing and in-kind contribution to develop a section in the manual for capturing, monitoring, and reporting in-kind contributions. • Disbursement will be based on validated 6 months cash forecast, and expenses will be justified based on quarterly interim financial report. 		
<p>Project Budgeting</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Risk:</p> <ul style="list-style-type: none"> • The project will have multiple financiers namely IFAD, ADB, Government Contribution, and Beneficiaries contribution. There is a risk of mix-up in budgeting and expenditure allocations to these multiple financiers. • There may be frequent delays in the submission of AWPB. This may arise from delays in sitting and approval by the project steering committees and difficulties in consolidating budgets from the lower levels of implementation. • Tough fiscal policies such as the Government's introduction of rupee covers may result in poor AWPB implementation. The Standby Arrangement (SBA) policies agreed between the Government and IMF may further challenge the implementation of AWPB for IFAD Financing and Government counterpart funds. 	<p>Substantial</p>	<p>Substantial</p>
<p>Mitigations:</p> <ul style="list-style-type: none"> • A dedicated and fully empowered PCU will be responsible for implementation of IFAD livelihood enhancement component of this co-financed project. With parallel financing mode, there is no risk of mixing of IFAD and ADB funds. Same applies to government counterpart of beneficiary contributions. • The cost tables, PDR/PC-1 and PIM will have sufficient details on key activities to be implemented and sources of finances for these costs. Subsequently, the AWPB will be prepared with adequate details on financing for key activities to ensure adequate guidance to the accounting team in booking of the expenditure. • PCU shall obtain the approval of AWPB & Procurement Plan through the PSC (by 30 April each year) and shall ensure that counterpart fund requirements of AWPB are reflected in the Annual Development Programme/budget of the provincial government. • Appropriate consultations should be held with representatives of the borrower in advance of the workplan development. Annual budget would be communicated in advance of setting the rupee cover. • AWPB/Procurement Plans shall be prepared in consultation with implementing partners/service providers and these IPs will be supported by PMU to ensure proper estimation of funding requirements in the AWPB. 		
<p>Project Organization and Staffing</p>	<p>High</p>	<p>Substantial</p>
<p>Risk:</p> <ul style="list-style-type: none"> • There may be delays in recruiting and filling vacant positions with suitably experienced and qualified personnel. Root causes may include weak capacity in the job market, interference in the recruitment process and underpayment on projects compared to market price. • The organizational structure of project may be inadequate for the implementation arrangement of the project. 	<p>High</p>	<p>Substantial</p>

<p>Mitigations:</p> <ul style="list-style-type: none"> • Core staff of the PMU—Project Director, Finance Manager/FM Specialist, FM Specialist, M&E Specialist should be engaged within eight (8) weeks of the date of signing of the Financing Agreement and will be a condition for disbursement of the initial advance. • Institution of a well-structured finance unit within the PCU that includes competent and qualified staff who can carry out project financial management as per the fund requirements. • All finance staff to undertake IFAD Online Finance Management practices and procedures course and IFAD anti-corruption training. In addition to that, finance staff to attend induction sessions on IFAD financial management requirements as conducted by IFAD Finance Officer. 		
Project Procurement	Substantial	Substantial
A.1 Legal, Regulatory and Policy Framework	Moderate	Moderate
<p>Risk:</p> <p>To some extent, the public procurement legal framework encapsulates the agreed principles and ensure compliance with applicable obligations. Implementing regulations notified so far support the legal framework. The country procurement system is just 2 decades old. There are some international best practices incorporated in the procurement legal framework. There are no supporting User Guides for the procurement practitioners. There is no downstream procurement procedural manual /guideline for the PAs to effectively ensure efficiency, economy and transparency during the procurement process. There is no procurement monitoring mechanism and Guide on contract management. Recent amendments relating to engagement of state-owned entities under direct contracting does not seem in line with promoting competition and transparency.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>PPRA should focus on meeting the development of missing standard procurement documents to complete the procurement regulatory framework at the federal level. Subsequently, PPRA should activate the National Institute of Procurement (NIP), take lead in designing of an annual calendar of a series of capacity building training programs. .</p>		
A.2 Institutional Framework and Management Capacity	Moderate	Moderate
<p>Risk:</p> <p>The institutional framework and management capacity may be treated as average. The procurement planning is aligned with annual budgeting exercise. However, there is no mechanism for detailed planning and updating of procurement plans during the year. PPRA is managed by its Board albeit some potential conflict of interest in terms of financial and administrative autonomy. The country procurement system is just 20 years old and it has to go a long way to achieve the desired institutional maturity and proper functioning. The public procurement system has a capacity to develop and improve. The progress is very slow but it is in the right direction. The ingredients required for introducing and operating e-public procurement system are being brought together.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>The main challenge is ensuring the development of desired capacity in the areas of procurement regulations, planning, transactions, monitoring, audit and contract management. The government must recognize procurement as a profession and do the needful as soon as possible. It should focus on promoting public procurement as a promising career stream with the introduction of necessary certification/accreditation.</p>		
A.3 Accountability, Integrity and Transparency of the Public Procurement System	Moderate	Moderate

<p>Risk:</p> <p>Capacity constraints lead to poor procurement planning and weak contract management. PPRA to take lead and coordinate with PEC and other professional bodies of Constructors and Consultants; design an annual calendar of training programs for the PAs on frequent issues relating to effective contract management. There is a communication gap between the public sector and private sector. There are representative professional bodies of suppliers, constructors and consultants in the country. Market knowledge for the PAs of critical sectors (energy, transport, irrigation etc.) may be updated through interaction with these bodies on a working relationship basis.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>There is a communication gap between the public sector and private sector which should be bridged through mutually agreed actions. These actions may include capacity building of both sides of the equation. The training activity should be coordinated by PPRA with PEC and these bodies.</p>		
<p>A.4 Public Procurement Operations and Market Practices.</p>	Substantial	Substantial
<p>Risk:</p> <p>The country procurement system is fairly new in performance of its operations. The country has ethics and anti-corruption measures in place. The components required for ensuring accountability, integrity and transparency of the public procurement system are somewhat present. The country has effective control and audit systems.</p> <p>There is always room for improvement and with the passage of time, the Authority will attain required level of operational maturity. Procurement is a cross-cutting function, one aspect is the audit activity. The country has a sound legal framework and institutional arrangements for external audit—though the practice of performance audit and procurement audit (as a sector) is not established. It is not clear whether the offices of Chief Internal Auditors will enhance the procurement efficiency or otherwise.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>PPRA to prepare a bucket list based on following. Plan an awareness campaign to sensitize the stakeholders on the functions and powers of the authority; coordinate with AGP office to start the practice of sector audit; liaise with NAB and FIA and discourage investigation of cases by them; prepare a case for establishment of office of the procurement ombudsman as highest procurement appellate authority.</p>		
<p>B.1 Assessment of Project Complexity</p>	Substantial	Substantial
<p>Risk:</p> <p>Initial implementation support would be mitigation any capacity challenges during the early stages of the project and subsequently ad hoc support to be provided</p>	Substantial	Substantial
<p>Mitigations:</p> <p>Ensure IFAD Implementation Support plus Procurement TA to be fielded by Project</p>		
<p>B.2 Assessment of Implementing Agency Capacity</p>	Substantial	Substantial
<p>Risk:</p> <p>The overall risk is established as substantial given the limited experience and capacity working with the new province.</p>	Substantial	Substantial

<p>Mitigations:</p> <p>Project procurement will be ring fenced within the Project PMU with adequate technical support both from IFAD and Government. Oversight mechanism through internal and external audits and IFAD PPA and supervision would ensure adequate controls with the PMU</p>		
<p>Project Procurement Overall</p>	Substantial	Substantial
<p>Risk:</p> <p>The Procurement Framework identified substantial risk</p>	Substantial	Substantial
<p>Mitigations:</p> <p>Mitigation measure in the form of IFAD SDB, its Handbook, IFAD OPEN System and ICP CMT would provide adequate measure to mitigate risk</p>		
<p>Environment, Social and Climate Impact</p>	Substantial	Moderate
<p>Vulnerability of target populations and ecosystems to climate variability and hazards</p>	Substantial	Substantial
<p>Risk:</p> <p>Pakistan is one of the most vulnerable countries in the world to climate change as a huge portion of its population depends on the on farm and off farm sectors. The effects of climate change are being felt in rural areas and across ecosystems with adverse impacts on natural resources and the livelihoods that they support. This exposure to vulnerability is predicted to be exacerbated with impending impact of climate change. Declining water availability and soil degradation is impacting agriculture at a time when demand for agricultural products continues to rapidly rise due to population growth and improving diets. The poor are likely to be hit particularly hard by climate change, and their capacity to respond to climate change is lowest.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>To reduce exposure to the inherent risks, the project will apply promotion of production practices and technologies that reduce exposure to increased variability as well as investment in water resources management. Awareness raising and building resilience particularly among the poor will be a key capacity building intervention. Restoration of ecosystem services (ADB) will contribute to reduced climate vulnerability, as well as diversification of income generation. An Environmental, Social and Climate Management Plan (ESCMP), and a Targeted Adaptation Assessment have been developed and integrated in PIM.</p>		
<p>Greenhouse Gas Emissions</p>	Low	Low
<p>Risk:</p> <p>The risk of any significantly increase in greenhouse gas (GHG) emissions and thereby contribution to anthropogenic climate change, are minimal.</p>	Low	Low
<p>Mitigations:</p> <p>Project involves no significant activities that would contribute to greater GHG emissions. Project will actively invest in bio-diversity conservation and ecology restoration measures.</p>		
<p>Physical and Economic Resettlement</p>	Moderate	Low
<p>Risk:</p> <p>The project does not entail any activity that could result in resettlements</p>	Moderate	Low

<p>Mitigations:</p> <p>No Risk envisaged.</p>		
<p>Community health, safety and security</p>	Moderate	Moderate
<p>Risk:</p> <p>Construction activities and use of agrochemicals, may have a negative impact on community health and safety.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>The project infrastructure activities will be small community-based schemes and use of heavy machinery and equipment is not anticipated.</p> <p>The project interventions are expected to result in greater availability of high nutrition value foods in households and communities, which are a key driver of health. The project will develop a gender strategy that will include specific actions to mitigate risks of Gender-Based Violence due to project initiatives</p>		
<p>Labour and Working Conditions</p>	Moderate	Moderate
<p>Risk:</p> <p>The project investments in public goods/ community infrastructure may result in exploitative labour practices (e.g. child labour), gender-based discrimination, discriminatory and unsafe/unhealthy working conditions. The project may cause exploitative labour practices like in kind community contributions of labour are assigned to poor (BISP Poverty Score Card Category 0-32) at the expense of their wage-earning opportunities.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>SCRIP will be implemented through a community driven participatory process. All investments will be identified, prioritized and agreed at community level. Standard conditions on all social safeguards, including labour and working conditions, will be made part of agreements between project/social mobilization partner and beneficiary communities. PMU and social mobilization partners will monitor the adherence to these conditions by the beneficiary communities. The chronically, extreme and vulnerable poor (BISP Poverty Score Card Category 0-32) will be exempt from any in kind contributions and priority preference will be given to the local poor in all wage labour opportunities in project funded infrastructure investments.</p>		
<p>Indigenous People</p>	Low	Low
<p>Risk:</p> <p>There are no indigenous people in the target area.</p>	Low	Low
<p>Mitigations:</p> <p>Not applicable and no risk envisaged.</p>		
<p>Cultural Heritage</p>	Low	Low
<p>Risk:</p> <p>The risk that the project may cause significant cultural or physical resource degradation, including threats to or the loss of resources of historical, religious or cultural significance. The known historical, religious or cultural resources are concentrated in the sub-urban area of Thatta City.</p>	Low	Low
<p>Mitigations:</p> <p>Project activities won't be developed in and close to areas with cultural heritage in compliance with SECAP.</p>		

Resource Efficiency and Pollution Prevention	Moderate	Moderate
<p>Risk:</p> <p>The risk that project resources are not used efficiently due to planning and management inadequacies and enough safeguards are not followed to prevent pollution as a result of project activities is 'moderate'.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>An elaborate and capacitated project management structure is designed at provincial and district levels backed by detailed processes and procedures elaborated in the PIM to ensure that project resources are used efficiently and produce the desired outcomes. Systems and processes will be regularly reviewed and updated by Project Supervision Missions. All hard/infrastructure project interventions will be screened for environmental soundness and measures will be incorporated in the execution arrangements to minimize any potential noise, air or water pollution. An elaborate and capacitated project management structure is designed at provincial and district levels backed by detailed processes and procedures elaborated in the PIM to ensure that project resources are used efficiently and produce the desired outcomes. Systems and processes will be regularly reviewed and updated by Project Supervision Missions. All hard/infrastructure project interventions will be screened for environmental soundness and measures will be incorporated in the execution arrangements to minimize any potential noise, air or water pollution.</p>		
Biodiversity Conservation	Moderate	Moderate
<p>Risk:</p> <p>The risk that the project may cause significant threats to or the loss of biodiversity, availability of diversified nutritious food, ecosystems and ecosystem services, territories of the indigenous peoples, or the unsustainable use/production of living natural resources is moderate. The risk may arise if the investments increase the production area or intensify fishing.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>The project is unlikely to have adverse impacts on biodiversity in the project area. The project will make investments in the eco-friendly introduction of climate smart and sustainable technologies for agriculture, livestock and fisheries. Communities will be consulted and sensitized on the need to conserve biodiversity and will be proactively engaged in all such efforts.</p>		
Stakeholders	Moderate	Moderate
Stakeholder Grievances	Low	Low
<p>Risk:</p> <p>Targeting, project implementation, quality of service may be potential sources of grievances.</p> <p>The project may fail to establish effective and easily accessible channels for registration of grievances, investigation and redress in a prompt/timely manner to the satisfaction of the aggrieved.</p>	Low	Low

<p>Mitigations:</p> <p>SCRIP will establish a comprehensive system of grievance redressal, a system that is responsive, objective, simple, fair, and time efficient. The system will make available four options for the registration of grievance – in person written complaints, through email, through SMS/Whatsapp, and through project website. All modes of complaint receipt will be widely publicised in the project area and beneficiary communities mentioning addresses, phone numbers, email addresses and web addresses. PMU and DCUs will establish accessible system for complaints/grievance receipt and protocols will be established for the logging of complaints and action thereof. Focal persons for grievance redressal will be notified in PMU and DCUs. District and Project level Grievance Redressal Committees will be notified. PMU will, as part of its monthly/quarterly reviews, will review progress on all grievances received and status of their enquiry and redressal.</p>		
<p>Stakeholder Engagement/Coordination</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Risk:</p> <p>Stakeholder engagement and coordination risks are moderate. Ensuring close coordination with parallel financed ADB interventions as well as coordination and collaboration between social mobilization & Value chain implementing partners, public sector entities and PMU will require effective leadership by PMU, clear role articulation and close oversight and accountability by Project Steering Committee. Beneficiary level targeting and participation in over 500 villages will also require a well-rounded community interaction strategy.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>A joint Steering Committee for ADB and IFAD investments will ensure close alignment of geographical coverage and investment synergies between the two sources of funds. A Project level coordination committee consisting of IFAD and ADB component Managers will assist in coordinated planning, budgeting and phasing of activities. Project's District Coordination Units will assist in close coordination between various implementing partners at field level. The project design and its institutional arrangements are based on extensive discussion with government, communities and lessons learnt. Capable social mobilization and agrivalue chain development partners are available in the province and will be engaged through a competitive process to lead the community level organization, targeting, need identification and intervention delivery in partnership with three identified public sector entities. Lessons learnt from earlier IFAD projects have been kept in view for implementation arrangements.</p>		
<p>Risk:</p> <p>There is a risk related to selection of the target group and their participation which consist of landless poor, smallholder farmers, sharecroppers, small fishermen, women and youth) in the project activities.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>Priority geographic areas and target groups have been clearly identified during design. Selection of target group and households particularly the extreme, chronically and vulnerable poor, will be guided by BISP Poverty Scorecard, based on National Socioeconomic Registry. A national Poverty Score Card is used for identification of poor households eligible for unconditional cash transfers. IFAD introduced this accurate and reliable targeting tool in the country which has a hallmark for targeting strategies for poverty reduction and smallholder agriculture development and is being adopted across the country by government and donors.</p>		

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 10: Exit Strategy

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

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Asia and the Pacific Division
Programme Management Department

Annex 10: Exit Strategy

SCRP's exit strategy is premised on leaving behind capacitated, inclusive and self-reliant Village Organizations and value chain interest groups, linked to competitive markets and private sector and sustainable access to formal sources of finance. The village and value chain development plans prepared and implemented with project assistance will provide the longer-term road map for the beneficiary groups to pursue beyond project life. Linkages developed with extension services, strengthened with project assistance, will continue to provide demand driven assistance to smallholders and fisherfolk.

SCRP's theory of change envisages a comprehensive set of contextual and responsive interventions to address the causes of poverty, low incomes, environmental and climate change challenges and women and youth empowerment. In doing so, the project adopts an inclusive, participatory and whole village approach where no one is left behind. To do so, the project offers a flexible menu of interventions covering all segments – smallholder farmers and fisherfolk, tenants and sharecroppers, landless poor and young men and women from poor families.

Addressing the supply side constraints and transitioning the rural economies to demand driven production and skills, promises to help the poor rural communities achieve sustainable increase in incomes and improved livelihoods in an inclusive manner. Introduction of an inclusive access to finance eco-system, in partnership with private sector financial institutions, will establish a credit history for the currently un-bankable smallholders and landless poor, improve financial literacy and reduce reliance on expensive and exploitative sources of credit. Provision of demand and context driven climate proofed social and economic infrastructure including link roads, drinking water supply, irrigation, household solar power systems etc., with community owned O&M systems, will not only improve quality of life in target poor communities but also reduce women's drudgery in water collection, reduce water borne diseases, improve nutrition and improve access to markets and services.

SCRP will assist provincial government in review of existing policies and carry out required reforms in areas and domains that directly affect the smallholder farmers, fisherfolk and rural poor in terms of access to services, markets, access to finance and productive resources. Key areas of reform identified under the project include agriculture tenancy regulations, settlement and ownership rights of fisherfolk in the buffer zone adjacent to sea, agriculture produce markets and access to affordable finance. Reforms in these areas will be a lasting benefit left behind by the project.

Under component 1, SCRП aims at creating self-sustaining and inclusive village organizations with a shared vision for their socio-economic development. The VO will be main vehicle for identification of various interest groups/producer organization around commonality of interests and vocations. Technical support will be provided to producer groups to develop investment, production and marketing plans, based on market demand and comparative advantage. Plans will also identify the community and value addition infrastructure and equipment that will help in aggregation, on-farm value addition, crop residue conversion into remunerative products and access to finance. The social mobilization process under VO umbrella, will also identify the landless poor, youth and women for assistance under component, in groups and individually. The sustainability of these producer and interest groups is predicated on the commercial viability of their plans and the linkages with market and extension and financial service that SCRП will build and that will continue beyond project life.

Commercially viable organizations of smallholder agriculturists and fisherfolk, with own financial and management capacity, pursuing a business plan that balances the equation

among landowners, smallholder/tenants and middlemen and links beneficiaries with markets and private sector in win-win profitable relationships will be key to their sustainability.

All community and value chain infrastructure will be identified through extensive community involvement, with women and youth priorities determined in separate sessions and given due weightage. The community infrastructure implementation will be community led with an upfront agreement on post completion O&M including O&M management structure, user fees, record keeping and accountability for performance. Same principle will apply to all value chain linked equipment and infrastructure provisioned to various producer groups. The type of infrastructure and/or equipment will be determined on the basis of group's production plans and should clearly demonstrate the value it will add to that production plan and group's income streams. The O&M arrangements will be upfront agreed with the group and, if required, necessary training will be provided to the group by the project for sustainable operations.

The current state of weak extension service provision will be addressed through investments in capacity development of extension, livestock and fisheries field offices and staff. They will be trained in participatory and demand driven service delivery approaches. The approach and lessons will be shared at provincial level to assist government in developing policies and strategies for a strengthened extension service provision to smallholder farmers.

SCRIP's financial inclusion strategy is aimed at freeing the smallholder farmers and fisherfolk from current middlemen dominated financial services that bound the producers to sell back the produce to middlemen at rates determined by him. This happens at the cost of farmers' profit margins and keeps them tied to middlemen. Lack of formal banks outreach in rural areas, lack of credit history and fear of cumbersome paperwork, keep the smallholders out of formal banking system. SCRIP will introduce a graduated partial interest subsidy scheme, through competitively selected commercial banks and micro-finance institutions to bring the smallholder farmers into formal banking system, build their credit history, simplify collateral requirements and, after two cycles, move them to regular credit services at commercial interest rates that are still very favorable compared to the terms offered by middlemen. Combined with other project interventions for value chain development and improved production, this will build the capital base of the smallholders and make them credible borrowers for the banks.

Based on a rapid labour market survey, Youth, including women, from poor BISP beneficiary households will be provided remunerative skills to find on-farm and off-farm employment and income generation opportunities. Experience from SPPAP and NPGP shows that 70 percent of such trained youth were able to find a job within three months of training. Those opting for a self enterprise based on learned skill will be assisted with a start-up grant to purchase the necessary inputs and rent a premises to run their enterprise. They will be further linked to project's access to finance component for scaling up their enterprises. This will ensure a sustained long-term infusion of additional incomes into poor households and help them move to higher level of economic well-being.

The project seeks to assist STEVTA becomes a dynamic technical and vocational education provider that reads market trends and has capacity to design and deliver such courses effectively. The project will enhance Institutional capacity at STEVTA to conduct labour market assessment and design and deliver course demanded by the market and, at the same time, tailor special courses for the less literate youth from poor households.

Climate change induced extreme events are quite frequent in the project area. SCRP will assist all VOs and Producer Groups to develop their production plans keeping in view this phenomenon. They will be assisted to select appropriate crops and crop cycles to mitigate the risks. Provision of larger ADB financing, aligned with SCRP, will address the infrastructure inadequacies vis-à-vis drainage, flood protection and sea intrusion in crop production areas. This will be further supplemented by SCRP with smaller on-farm drainage, irrigation efficiency, and water storage facilities. All VOs will undergo comprehensive sensitization and coping strategies sessions organized by SCRP. The knowledge and practices thus transferred will assist the communities to build resilience against climate change related events and threats

Gender, nutrition, youth and climate change concerns will be mainstreamed into all facets of value chain planning, community training and knowledge building and linkages with other regular government programmes working in these areas. SCRP will in particular focus, through its social mobilization approach and processes, targeting strategy and community training sessions to improve gender equations, increase voice and agency of women and youth in household and community decision-making and improved nutrition outcomes at community and household level. This will lead to more socially cohesive rural communities.

SCRP will assist the provincial government to improve the regulatory environment for tenancy and land tenure arrangements, housing land ownership rights and provision of civic services in coastal buffer zone communities, agriculture and rural development credit, agriculture marketing and service provision standards and enforcement mechanisms, ecosystem restoration and protection, and climate adaptation. These aspects are of critical importance, specially for the poor and vulnerable communities in agriculture hinterland and coastal areas. Appropriate changes in relevant policies and regulations will have the most lasting impact on the well-being of SCRP target beneficiaries.

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex 11: Mainstreaming themes – Eligibility criteria checklist

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

Mainstreaming themes – Eligibility criteria checklist						
	<input type="checkbox"/> Be gender transformative	<input checked="" type="checkbox"/> Be youth sensitive	<input checked="" type="checkbox"/> Be nutrition sensitive	<input type="checkbox"/> Prioritize persons with disabilities	<input type="checkbox"/> Prioritize indigenous peoples	<input checked="" type="checkbox"/> Include climate finance <input checked="" type="checkbox"/> Build adaptive capacity
Situation analysis	<input type="checkbox"/> National gender policies, strategies and actors <input type="checkbox"/> Gender roles and exclusion/discrimination <input type="checkbox"/> Key livelihood problems and opportunities, by gender	<input checked="" type="checkbox"/> National youth policies, strategies and actors <input checked="" type="checkbox"/> Main youth groups <input checked="" type="checkbox"/> Challenges and opportunities by youth group	<input checked="" type="checkbox"/> National nutrition policies, strategies and actors <input checked="" type="checkbox"/> Key nutrition problems and underlying causes, by group <input checked="" type="checkbox"/> Nutritionally vulnerable beneficiaries, by group	<input type="checkbox"/> National policies, strategies and actors <input type="checkbox"/> Main groupings among PwDs <input type="checkbox"/> Context-based barriers and opportunities for PwDs	<input type="checkbox"/> International standards, national policies, strategies and key IPs' organizations <input type="checkbox"/> Main IPs communities, demographic, social, cultural and political characteristics <input type="checkbox"/> Important livelihoods constraints and opportunities for IPs and their cultural heritage	
Theory of change	<input type="checkbox"/> Gender policy objectives (empowerment, voice, workload) <input type="checkbox"/> Gender transformative pathways <input type="checkbox"/> Policy engagement on GEWE	<input checked="" type="checkbox"/> Pathways to youth socioeconomic empowerment <input checked="" type="checkbox"/> Youth employment included in project objectives/activities	<input checked="" type="checkbox"/> Nutrition pathways <input checked="" type="checkbox"/> Causal linkage between problems, outcomes and impacts	<input type="checkbox"/> Pathways to PwDs' socioeconomic empowerment using a twin-track approach	<input type="checkbox"/> Pathways to IPs' socioeconomic empowerment	
Logframe indicators	<input type="checkbox"/> Outreach disaggregated by sex, youth and IPs (if appropriate) <input type="checkbox"/> Women are > 40% of outreach beneficiaries <input type="checkbox"/> IFAD empowerment index (IE.2.1)	<input checked="" type="checkbox"/> Outreach disaggregated by sex, youth and IPs (if appropriate) <input checked="" type="checkbox"/> Persons with new jobs/employment opportunities (CI 2.2.1)	<input checked="" type="checkbox"/> Outreach disaggregated by sex, youth and IPs (if appropriate) <input checked="" type="checkbox"/> Targeted support to improve nutrition (CI 1.1.8) Outcome level CIs <input type="checkbox"/> CI 1.2.8 MDDW <input checked="" type="checkbox"/> CI 1.2.9 KAP	<input type="checkbox"/> Outreach disaggregated by sex, youth, disability and IPs (if appropriate)	<input type="checkbox"/> Outreach indicator disaggregated by sex, youth and IPs <input type="checkbox"/> IPs are > 30% of target beneficiaries	
Human and financial resources	<input type="checkbox"/> Staff with gender TORs <input type="checkbox"/> Funds for gender activities <input type="checkbox"/> Funds for IFAD empowerment index in M&E budget	<input checked="" type="checkbox"/> Staff with youth TORs <input checked="" type="checkbox"/> Funds for youth activities	<input checked="" type="checkbox"/> Staff or partner with nutrition TORs <input checked="" type="checkbox"/> Funds for nutrition activities	<input type="checkbox"/> Staff with disability inclusion-specific TORs <input type="checkbox"/> Funds for disability inclusion-related activities (including accessibility)	<input type="checkbox"/> Staff with IPs-specific TORs <input type="checkbox"/> Funds for IPs related activities, including FPIC	IFAD Adaptation Finance \$28,770,000 IFAD Mitigation Finance \$0 Total IFAD Climate-focused Finance \$28,770,000

<p>ECG Remarks</p>	<p>Gender</p> <p>In line with the Sindh Gender Equality and Women's Empowerment Policy (2020-2030) and IFAD's three Gender Policy objectives, the key entry points for promoting gender equality and women's empowerment through the project are: i) conducting gender sensitive social mobilization and addressing social norms which limit women's participation in the project, ii) targeting activities and services to specific groups of women (age, socio-economic status and livelihood sector), iii) strengthening women's decision-making role at community and organization level, and iv) promoting labour-saving technologies to reduce drudgery. Gender disparities and social norms which limit women's participation are addressed through greater access to remunerative activities, participatory forums, and increased female-controlled income and sensitization sessions on intra-household shared decision making. Labour-saving technologies linked to domestic water use are promoted to tackle women's time poverty and free up time to perform productive tasks and participate in decision-making processes. Increased decision-making power of women has a positive impact on household expenditures on health and more diversified diets. Social and behaviour change activities towards improving target groups' knowledge and practices on food choices (in production, purchase and consumption), food preparation, processing and conservation, healthy diets along with good hygiene and sanitation practices contribute to improved nutrition at household level. Of direct project beneficiaries, 40 percent will be women.</p> <p>Nutrition</p> <p>The main nutrition pathways for SCRCP are built around four intervention domains: (i) Community mobilization/Sensitization, (ii) Women's economic empowerment, (iii) Improvement in Hygiene and Sanitation (WASH) and (iv) Strengthening Agriculture (Nutritious food production). Opportunities for improved nutrition for local communities will be sought under Component 1 through the value chain/interest groups plans and through improved and nutrition sensitive agriculture and fisheries production systems. Trainings and capacity building for managers of Village Organisations (VOs) and members will pay specific attention to nutrition awareness, dietary diversity, recipe demonstration, WASH, food hygiene and production of nutrient rich commodities as part of value chain or through additional activities like kitchen gardens and identification of nutritionally superior indigenous foods. The participatory process will ensure nutritious crops and commodities are identified that can address the challenges related to nutrition while also being climate-resilient and economically viable. The engagement with the VOs will also attempt to map the local indigenous foods that are climate resilient and nutritionally superior, and work on a plan to explore its mainstreaming into diets of communities. Collaboration will be sought with relevant ongoing programmes like PINS for nutrition education and supplementary assistance in target communities.</p> <p>Youth</p> <p>Youth are expected to present 30% of SCRCP beneficiaries. The project targets young people (age group 15-29) as part of the Village Organisations under Component 1 and through specific activities under sub-component 2.2. The sub-component is aimed at achieving job-market readiness for the young men and women (15 to 29 years of age) from poor households through provision of vocational, technical and enterprise skills. Choice of vocations and technical skills will be guided by a rapid baseline Labour Market Survey by partner organization, in collaboration with STEVTA and availability of appropriate courses and training facilities within the project target area. The skills will be aimed at either finding remunerative salaried jobs or starting an income generating self-enterprise based on the learned skill. Project will also encourage group-based enterprises where young men and women of similar interest and skills will be assisted to start an enterprise linked to value chain and other local market opportunities.</p> <p>Persons with Disabilities</p> <p>Indigenous Peoples</p> <p><input type="checkbox"/> No social inclusion themes</p>
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Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex: SECAP - Annex ESCMP_Environmental, Social and Climate Management Plan

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

Sindh Coastal Resilience Project

**Social, Environmental and Climate
Assessment Procedures (SECAP)**

**Environmental, Social and Climate Management Plan
(ESCMP)**

March 2024

1 Background and Introduction

The Sindh Coastal Resilience Project (SCRP) is a hybrid intervention type project where hard as well as soft activities will be implemented in the coastal districts to protect the population from climate induced disasters on one hand and improve their livelihoods, on the other. ADB is financing the infrastructure part aimed at mitigating the impacts of climate change through investments in natural and engineered protection against sea intrusion, drainage of water-logged and flood vulnerable areas and improved availability of freshwater for agriculture and household use. In parallel, IFAD is financing the livelihoods component of the project for smallholders, landless, women and youth through an inclusive and demand driven strategy, approach and interventions.

Sindh is located in the South-eastern region of Pakistan and is the third-largest province of the country by land area and the second-largest province by population. In the Southeast, Sindh has about 250 km long coastline along the Arabian sea with ports and harbours for commercial and fishing activities. The economy of Sindh is the second largest in Pakistan after Punjab. Rural Sindh has an agriculture-based economy and produces fruits, cereals, cotton, sugarcane and vegetables for internal consumption and export to other parts of the country. SCRP is focused on the three districts that make up the Indus River Delta: Thatta, Sujawal and Badin.

This semi-arid area, characterized by specific ecosystems in this deltaic zone, is highly degraded due to massive water withdrawals upstream along the Indus River (mangrove degradation, salinization). This zone is particularly affected by Climate Change directly (high temperatures, cyclones) and indirectly (floods). The three districts are also affected by poverty. The poor derive 56 percent of their income from agriculture. People lack clear land tenure rights and most of the poor smallholders depend on landowners and middlemen. 84 percent rural households are landless and work as tenants/sharecroppers and daily wage earners. Of the landowners, 84 percent own less than 25 acres. Small holdings, traditional low input-low output production systems, lack of access to technology, services and financial services, and small and scattered marketable surpluses keep performance of smallholder farming below potential. Coastal fishermen communities are the most deprived in terms of productive assets and social infrastructure/services. In Sindh, about 30-35 percent of the population lives below the poverty line. The prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively and exceed the national averages of 20 percent and 40 percent respectively.

The SECAP review note provides a more detailed description of this overall situation.

The main purpose of this Environmental, Social and Climate Management Plan (ESCMP) is to clarify the Environmental, Social and Climate risks related to the IFAD-supported project, and set out the action plan to avoid, minimize or mitigate these risks. The ESCMP ensures compliance with SECAP 2021 Policy. The ESCMP Matrix (section 8) provides an overview of the suggested mitigation measures. As villages and value chain plans will be determined at early stage of the project, the Management Plan will have to be adapted and refined as sub-project management plans. Annex 1 provides guidance for the implementation of this management plan at early stage of the project.

2 Project Overview

Project Development Objective and Project Components

The Project development objectives are to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production under climate smart agriculture and fisheries production plans leading to 4P (public-private-producer-partnership) based value chain development that facilitate integration with markets and services; (ii) Increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilitates access to natural resources and support services.

Project Components: SCRP will have an inclusive approach to transformation of economies and incomes in the target rural communities. The project consists of three complementary components that address the causes of poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.

(i) Transformation of Coastal Rural Incomes: Rural communities organized and assisted to develop capacities for market oriented improved productivity and production and value addition and transition to higher value outputs/products based on structured value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.

(ii) Economic and social Inclusion of Disadvantaged Groups (job market and value chain participation facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored enterprise development and technical and vocational service provision).

(iii) Project Management and Policy Support: Establishment of an efficient project management structure (a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing etc.).

3 Legal Provisions

A number of institutions, policies, legal acts, programmes exist at the national and provincial level for the protection of the environment, mitigation of climate change impacts, youth development, gender empowerment and nutrition. A brief of some of the important institutions and acts relevant to the project implementation and risk management is given below. PMU will have to ensure compliance with this legal framework.

Sindh Environmental Protection Act, 2014. The Act provides for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and

control of pollution, and promotion of sustainable development. In addition, it establishes composition, duties and responsibilities of the **Sindh Environmental Protection Council**, entitled to: coordinate and supervise the enforcement of all the provisions relating to the environment in the Province; approve comprehensive provincial environmental and sustainable development policies and ensure their implementation within the framework of a conservation strategy and sustainable development plan; approve the Sindh Environmental Quality Standards; provide guidelines for the protection and conservation of species, habitats, and biodiversity and for the conservation of renewable and non-renewable resources; integrate principles and concerns of sustainable development into socio-economic and development policies, plans and programmes at the provincial, district and local levels; deal with inter-provincial and federal-provincial issues; provide guidelines for biosafety and for the use of genetically modified organisms; etc.

In addition, it creates the **Sindh Environmental Protection Agency (EPA)** entitled to administer and implement the provisions of this Act and the rules and regulations regarding the environmental issues. The Act specifies that no person shall discharge waste, pollutant, emit noise or any other matter that may cause or likely to cause pollution or adverse environmental effects (as defined in Section 2) in levels higher than specified in Sindh Environmental Quality Standards. No person shall import hazardous waste into Sindh province or its coastal, internal, territorial or historical waters, except prior approval of the Agency. Part VI deals with Environmental Examinations and Assessments and specifies that all provincial authorities, local councils and local authorities responsible for formulating policies, legislation, plans and programmes to be implemented in Sindh province which may cause any environmental impact in the jurisdiction of the province shall forward to the Sindh Environmental Protection Agency a strategic environment assessment.

Sindh Climate Change Policy, 2022. The goal of the policy is to ensure that climate action is mainstreamed in the development planning and especially in the economically and socially vulnerable sectors of the economy; and to steer Sindh province towards green growth and climate compatible development. Some of the important objectives include:

- a. Formulate a province specific policy presenting the full picture of the climate change situation in the province, its affects and provide for a robust set of solutions and implementation plans to mitigate the effects, keeping in view the National Climate Change Policy (October 2021) and the Twelfth Five-Year Plan (2018-23) of the Federal government that combines inclusive growth with green development.
- b. Embed the concepts of Climate Compatible Development and Sustainable Development Goals in the climate change policy in order to improve the understanding of the policy makers and ensure water, food, energy, health & nutrition security for Sindh province in the face of a changing climate.
- c. Ensure interests of vulnerable groups and that gender aspects are adequately addressed in climate development strategies and planning.
- d. Develop a basis to provide for the required human, financial and technological resources and inter and intra coordination mechanisms and frameworks which are required to further the policy objectives and undertake necessary actions, in a clear, timely manner to mitigate the adverse effects of climate change.

e. Enhance awareness of the impacts of climate change among all stakeholders for necessary appropriate measures to combat and minimize these impacts.

Sindh Poverty Reduction Strategy (2018) is aimed at facilitating local economic development that generates income-generating opportunities for the poor in rural and urban areas, facilitating improved access to physical assets, education, vocational skills training, primary health care, improved nutrition and social services, through improved consolidation and cost effectiveness of service delivery. The Community Driven Local Development approach promoted has been carried out with the support of public organizations such as NRSP (National Rural Support Programme) and SRSO (Sindh Rural Support Organization), customary to support Community Organizations and their networks. Programmes and projects such as the National Poverty Graduation Program and GRASP (Growth for Rural Advancement and Sustainable Progress- in Sindh and Balochistan), must be taken into account.

Sindh Youth Policy 2022. The Province of Sindh had its Youth Policy approved in 2018. The policy aims to empower young people across economic, social, and political spheres. It identifies key challenges faced by youth and proposes effective institutional mechanisms. It lays out a comprehensive action plan spanning short, mid, and long-term strategies, but its targets and resource allocation were only established for the first five years (2018-2023). The primary focus of efforts to enhance the economic empowerment of youth revolved around bolstering education, cultivating new skill sets, offering vocational training and extending support and financing for businesses led by young entrepreneurs.

A **National Gender Policy Framework 2022** has been launched and inputs sought from the provincial governments.

Sindh has adopted a **Gender Equality and Women's Empowerment (GEWE) Policy (2020-2030)**. The vision of this policy is that women and girls are equal citizens and participants in decision-making from the home to the national and international levels, are able to lead a life free from violence, discrimination, exploitation, neglect and abuse, and enjoy the full range of their social, political and economic rights. While the main objectives are safeguarding gender equality and the rights of women and girls, mainstreaming gender and investing in projects for removing barriers to gender equality and women's empowerment.

Sindh Commission on Status of Women, Strategic Plan 2022-24 has been implemented with a vision where women enjoy gender equality, live with dignity, are empowered, and protected, and contribute as equal citizens to development in an environment free from all forms of violence and discrimination. Important objectives set for the Commission are to examine policies for women's development and gender equality and to review laws, rules and regulations affecting the status of women.

Furthermore, a project funded by JICA, supporting women economic empowerment has been recently completed in Sindh: (Livelihoods and Well-being of Female Home Based Workers in the Informal Economic Sector in Sindh Province - LIGHT-F Project). Implemented with the Women Development Department of GoS, it has developed a set of tools to enable women to acquire professional behaviors and to use more financial services. Some of those tools, developed for rural context, could be considered under component 2 of the SCRP.

A **Multi-sectoral Nutrition Strategy** has been adopted for 2018-2025. Through the BISP, WFP provides nutrition and health support to pregnant women and mothers of young babies in Sindh. This programme must be considered to take advantage of nutrition awareness provided to mothers and move forward for actions leading to better food security for households.

Sindh Drinking Water Policy 2017. The goal of the policy is to improve the quality of life of people of Sindh by reducing morbidity and mortality caused by water-borne diseases through provision of safely managed and potable drinking water to the entire population that is located on premises, available when needed, and free from contamination, affordable and of sufficient quantity, and in a way that is efficient, equitable and sustainable. Major objective is to create an enabling framework for safely managed drinking water supply, regulation of water usage, extraction, treatment, transportation and distribution.

Sindh adopted an **Agricultural Policy for 2018-2030**. The Policy also seeks to reduce rural poverty along with food insecurity and malnutrition. Efforts will be made to increase the agricultural sector growth to 4-5% per annum, which is a necessary condition to raising incomes and reducing poverty and food insecurity; providing decent employment, particularly to the large numbers of youth entering the labour market. Higher overall growth and increased productivity will be the main engines for reducing poverty and malnutrition in rural areas. One of the major objectives of the Policy is: Make efficient and sustainable use of natural resources and minimize negative environmental impacts, and make all efforts to preserve the agro-ecological resource base.

The key natural resources for agriculture in Sindh are its soil and water and to conserve these, Government will promote better on-farm water management; regulate and control groundwater resources, coastal areas, and rangelands; enhance effective controls on pollutants, including fertilizer, pesticides and effluents; and promote agro forestry and improvement of grazing areas. SCRIP fully meets these objectives. In addition, Climate change impacts affect agriculture and actions to adopt more resilient practices are needed. The Irrigation Department is also involved in flood control, protection, and drainage.

The **Nationally Determined Contributions (NDC)** have been updated in 2021. Among various principles, GoP highlights the potential of Nature Based Solutions for climate mitigation, climate adaptation and livelihood opportunities. GoP intends also to improve cross-referencing to climate change in national and provincial policies and action plans on climate adaptation and mitigation. In agriculture, smart inputs and management practices in agriculture and livestock management are promoted (improved irrigation practices and water management; climate resilient agriculture/ agroforestry practices; introduction of climate resilient seed varieties; promotion, storage and management of green manure). In addition, in particular for Sindh, the blue carbon ecosystems are seen as untapped carbon sink amid other Nature Based Solutions. This blue carbon is mainly composed of mangroves, tidal marshes and seagrass beds that characterize the project area.

The Federal Cabinet approved a **National Adaptation Plan (NAP)** in July 2023 to fashion an effective response to increasing frequency of climate change induced disasters. NAP is a framework for implementing large-scale environmental adaptation, building climate resilience, promoting inclusivity, facilitating collaboration among different stakeholders, and serving as an effective tool for climate finance mobilization. The plan outlines ten

priority areas including addressing increasing water scarcity, protecting natural endowments, urban resilience, human capital development and disaster risk management.

The **Sindh Wildlife and Protected Areas Act 2010**. The Act provides legal cover to the policies of the government to meet the local, provincial, national and global requirements for protection, preservation, conservation, management and sustainable use of biodiversity, especially wildlife and their habitats in the Province as a key component of biological diversity with due recognition to social, cultural, economic, biological and ecological significance for the present and future generations, and to provide for and to support participation of local communities by creating enabling environment, raising awareness, building capacities and providing economic incentives for promotion of their social, economic, cultural and ecological well-being including poverty reduction. However, the natural ecosystems of Sindh are severely affected by the lack of freshwater in the Indus River, the various pollution from industries and agriculture (pesticide, overgrazing), logging for wood fuel, raising important negative impacts on wildlife.

4 Brief Environment, Climate and Social baseline information in the project locations

4.1 Climate Trend and Baseline

The province of Sindh is situated in a subtropical region; it is hot in the summer and cold in winter. Temperatures frequently rise above 46 °C (115 °F) between May and August, and the minimum average temperature of 2 °C (36 °F) occurs during December and January. The south westerly monsoon wind begins to blow in mid-February and continues until the end of September, whereas the cool northerly wind blows during the winter months from October to January. Sindh lies between the two monsoons — the southwest monsoon from the Indian Ocean and the northeast or retreating monsoon, deflected towards it by the Himalayan mountains — and escapes the influence of both. The region's scarcity of rainfall (average annual precipitation between 180 mm and 300 mm in Sindh) is compensated by the inundation of the Indus twice a year, caused by the spring and summer melting of Himalayan snow and by rainfall in the monsoon season. These natural patterns have recently changed somewhat with the construction of dams and barrages on the Indus River. Erratic rainfall patterns are mentioned: parts of southeastern Sindh received rainfall of up to 36 in (91 cm). In 2005, Hyderabad received 14.4 in (37 cm) in just 11 hours.

According to the Intergovernmental Panel on Climate Change (IPCC), there has been 0.6 to 1.0°C rise in average temperatures since the early 1900s in the coastal areas of Pakistan. 10 to 15% decrease in precipitation in the coastal belt and hyper arid plains over the last 40 years has been observed. It has been predicted that the Western Himalayan glaciers may retreat during the next 50 years, resulting in a decrease in downstream river flows by 30% to 40% over the subsequent fifty years.

An analysis of the changes in minimum and maximum temperature and rainfall in Sindh coastal area has shown that yearly mean maximum temperature fluctuated between 32.3 to 35.1°C, while that of minimum mean temperature ranged between 18.8 to 20.8°C which revealed that mean minimum temperature was towards the higher side. The average

rainfall has also reduced and the overall impact on surface water bodies and vegetation has been adverse from 1972 to 2010. Vegetation species diversity has been reduced considerably and currently the vegetation is dominated by salt tolerant shrubs like the family of Chenopodiaceae and Tamericeae.

The annual precipitation of Pakistan has increased significantly by 61 mm from 1901 to 2007. The World Bank and ADB (2021) has warned of changes to Pakistan's rainfall and runoff regimes, and hence its water resources, were highly uncertain; an increase in the incidence of drought conditions was likely. Mean rainfall in the arid plains of Pakistan and the coastal belt has decreased by 10%–15% since 1960, contributing to the ongoing degradation of the country's wetlands and mangrove ecosystems. Most other regions have experienced a slight increase, seen both in the monsoon and dry seasons. The number of heavy rainfall events has increased since 1960, and the nine heaviest rains recorded in 24 hours were recorded in 2010.

Only considering the precipitation data of Sindh over the decades, the vulnerability of the province to floods cannot be depicted²⁶. Floods were relatively uncommon in the province. The problems of floods in Sindh are mostly connected to the downstream flow of water through the Indus River. Therefore, the focus should be directed towards the local conditions as well as the changing precipitation patterns of the Upper Indus Basin. The heavy downpour of KP inundating the Indus Delta in 2010 and 2011 and local rainfall resulted in heavy flooding in Sindh.

A recent study has analyzed 57 years (1961-2017) time series climate data of Thatta, Sujawal and Badin districts and has shown rising trends in temperature. This study has concluded that the margin between the mean annual maximum and minimum temperature continues to get narrower. The 48 years (1961 to 2008) data analysis has also shown that precipitation seemed to be declining across these districts. Relative humidity and wind speed have decreased in Thatta and Sujawal while both have increased in Badin during 48 years.

Climate change and variability will have significant impacts on food security and malnutrition. They will lead to more intense and longer droughts and the frequency of heavy precipitation events has increased over most land areas. Droughts and water scarcity diminish dietary diversity and reduce overall food consumption, and this may lead to malnutrition. The risk of flooding may increase, from both sea-level rise and increased heavy precipitation in coastal areas. This is likely to result in an increase in the number of people exposed to diarrheal and other infectious diseases, thus lowering their capacity to utilize food effectively.

Recent history of district Badin shows that it has remained in the grip of disasters in one form or another. Cyclone, heavy rains, droughts and floods have followed each other with short intervals. The frequency of floods from upstream, local heavy rains and droughts is higher than other hazards. With the decreased flow of freshwater in Indus river, the sea is encroaching Indus's delta and the courses Indus has left in Thatta. The sea intrusion is also severely affecting the aquifers at many places in the district where groundwater and lands have become saline. Villages and union councils along the coast are having a history of being hit by cyclones. Being a dry region, Thatta always faces the risk of droughts. The Kohistan and desert zone of the district are especially vulnerable to this hazard as they face extreme shortage of potable water.

4.2 Physiography

The **deltaic plains of Sindh** lie in the Lower Indus valley. This very flat zone, known to be fertile, consists of alluvium, trenched with river channels in some places and overridden by raised terraces in others. It is the end of the transboundary Indus River Basin plain that covers 65% of Pakistan (FAO Aquastat). Due to its unique topography and hydrology, the basin and its delta are prone to severe flooding during the monsoon season.

Located in the Indus delta, the three districts of Thatta, Sujawal and Badin are characterized by both the aridity of its climate (average annual precipitation between 180 mm and 300 mm in Sindh) and the presence of water (Sea, and the Indus River fed by the monsoon season and melting of Himalayan snow upstream). This coastal plain is known for hosting one of the largest mangrove forests of the world and a rich biodiversity of birds and fish. However, the three districts have been progressively facing significant degradation of their ecosystems for the past 60 years.

Mangroves are spread over 0.84 m ac (0.344 million ha) and are protected under the 1927 Forest Act by the Government of Pakistan. The 342 km long and 50 km wide coastal belt along the Arabian Sea is a complex and distinct environment, pre-dominated by the Mangrove ecosystem. Badin, Sujawal, Thatta and Karachi districts coast is covered by 180,310 ac (73,000 ha) of Mangroves of the Indus which are ranked as the 6th largest contiguous freshwater mangroves worldwide. Mangroves form a unique assemblage of flora and fauna, providing a complex detritus-based food web for a number of marine and brackish water organisms. They serve as breeding grounds for fish and shrimp, protect Karachi and Bin Qasim ports from silting, and the city of Karachi from tsunamis. The main tree species growing in these forests is *Avicennia marina* which is locally known as timer and forms 97% of the total Mangrove tree cover. Other species are *Rhizophora macronata*, *Ceriops tagal*, and *Aegiceras corniculata*.

Forests. Total forest cover in the province is 2,553,980 ac (1,034,000 ha) where four different types of forests are found. (a) Riverine forests occur along the protective embankments on both sides of River Indus. These forests rely on inundation by River Indus for irrigation and, therefore, their existence is heavily dependent on the intensity, duration, and frequency of river water flow. Riverine forests are the mainstay of forestry in Sindh. Besides providing a source of livelihood for thousands of people, these forests provide fuel wood, timber, fodder, honey, and tannin. Moreover, they serve as carbon sinks and also protect the surrounding areas from the severity of floods. (b) Irrigated forests are canal irrigated plantations and are also known as Inland forests. These are covering over 203,306 ac (82,310 ha). Eucalyptus is the most common tree species of irrigated forests. Other common trees are semul, mulberry, java plum and lead tree (used as fodder).

Biodiversity and protected areas

Wildlife surveys were undertaken in the prime wildlife habitats of Sindh during 2010 – 2018 and a total of 82 species of mammals, 420 species of birds, 103 species of reptiles, 7 species of amphibians and 33 important plant species were recorded from these areas. The key species include: Sind Wild Goat, Urial, Chinkara deer, Leopard, Bluebull, Hog Deer, Hyena, Caracal, Honey Badger, Fishing Cat, Desert Fox, Indus Dolphin, Humpback Dolphin, Indian Peafowl, Sarus Crane, Houbara Bustard, Marbled Teal, Grey Partridge, Chakur, Indian Whitebacked Vulture, Indian Longbilled Vulture, Shaheen Falcon, Marsh

Crocodile, Green Turtle, Olive Ridley Turtle, Indian Python, Desert Monitor, Fat tailed Gecko, Spiny tailed Lizard and Freshwater Turtles. This unique and rich wildlife, due to the presence of various ecosystems and diverse range of landscapes including deserts, wetlands, riverine and mangrove forests, agriculture and coastal areas, has been protected in a network of protected areas spread over different ecosystems. Sindh counts 50 Protected Areas (One National Park, 33 Wildlife Sanctuaries and 16 Game Reserves), 10 Ramsar Sites, 19 IBAs and three Eco-regions representing the major ecosystems of the province.

However, these ecosystems are heavily affected by the massive water withdrawals upstream along the Indus River for agriculture. Due to intense uses all along its watershed (dams, reservoirs, and irrigation), the current flow observed in the Delta are most of the time far below 10 MAF (Million Acre Feet) and the 27 MAF recommended by IUCN. As a result, the Delta of Indus does not receive enough freshwater, leading to seawater intrusion into surface and groundwater resources, accelerating coastal erosion and reducing sediment deposits, impacting the mangrove also affected by overgrazing. In addition, in the semiarid context of Sindh, inappropriate irrigation management accelerate soil salinization. And finally, damages of natural waterways and drainage canals in the region, generate regular water logging. This deterioration in ecosystems is mainly observed in the southern part of the project area.

4.3 Socio-economic baseline

With 153,018 households, Sujawal district population is about 0.78 million as per the 2017 census. 89.0% of Sujawal's population resides in rural areas and 11.0% in urban areas. Male population is 406,754 and females are 375,193. Thatta's population is about 0.98 million which consists of 184,868 households according to the Census of 2017. 82% of the population lives in rural areas and the remaining 18% in urban areas. Out of them, 510,279 are males (52%) and 469,504 are females. Badin has the highest population of about 1.8 million with 359,376 households. Male population is 932,488 (52%) while females are 871,979, out of which 78% live in rural areas.

The socio-economic situation of each of the three districts is quite similar. The population area is predominantly rural (78 to 89 percent) and the majority lives in poverty (82 to 86 percent of the population is multidimensionally poor). Thatta has the highest score of multidimensional poverty index (0.6) in Sindh followed by Badin and Sujawal (0.5 each). A study on asset-based poverty index showed that tehsils of Badin district such as tehsil Golarachi (0.78), Tandobago (0.76), and tehsil Malti (0.75) are the poorest whereas Thatta also showed high asset-based poverty¹. Badin is considered with high incidence of poverty where 40 percent of population live below poverty line². A significant 69.0% of household members in District Thatta are in severe poverty³.

The target districts are mostly agrarian with major occupations of farming, fishing and rearing livestock. There are two crop seasons, Rabi (winter) and Kharif (Summer) with major crops of rice, sugarcane, cotton and vegetables. In Badin, about 69 percent of the

1 <https://fbi.springeropen.com/articles/10.1186/s43093-022-00162-4>

2 Clustered deprivation: District Profile of Poverty in Pakistan. SDPI 2012.

3 Sindh District Profiles 2021, Planning and Development Department, Government of Sindh.

area is irrigated and cropped, 13 percent area is saline and about 7 percent area is wet. While Thatta (including Sujawal) shows a totally different picture where only 20 percent area is irrigated and about 40 percent area is wet. There are six sugar mills and 30 rice husking mills in the district but remains one of the poorest districts of Sindh. Irrigation (presence of Indus), fishery (presence of the seacoast), Livestock and industries (closer to Karachi) are more developed in Thatta and Sujawal than in Badin.

5 Environment, Climate and Social impacts and mitigation measures

5.1 Brief overview of project activities

In addition to the ADB supported components related to ecosystem restoration (green infrastructure aiming at restoring mangrove and in-land forest, and grey infrastructure seeking to rehabilitate surface drainage system and water flow), the IFAD-supported SCRP has three components supporting livelihoods:

Component-1 involves transformation of coastal rural incomes by organizing target villages for the development and implementation of village development plans for different income groups. Village Development Organizations (VOs) will identify and prioritize community infrastructure investments while interest groups plans will be the basis for identification of value chain related investments/infrastructure. Each VO will be eligible, on average, for a grant of US\$ 50,000, to address (a) priority infrastructure needs (drinking water, sanitation, irrigation, all weather road links, household solar systems etc.); (b) equipment and infrastructure for product processing, aggregation, value addition Infrastructure investments will be for schemes benefitting the entire village while value addition/processing investments will be focused on interest groups.

Component-2 for social and economic inclusion of disadvantaged groups will involve provision of income generating production assets to landless and assetless households. Nature of the asset will be such that it quickly adds to the income of the family as per prevailing opportunities in the area like handheld reaper or mechanical tiller or a sheller or a processing, value addition or haulage equipment. This component will also benefit young men and women from poor households through provision of vocational, technical and enterprise skills. These young men and women will be selected from households other than those who received productive assets.

Component-3 is on policy management, promotes sustainable innovation and ensure project management and support.

Proposed investment per village is limited to USD 50,000 to be spent on prioritized construction related activities including drinking water facilities, sanitation, small community level irrigation schemes and roads during the project life. The scale and magnitude will be quite limited and will not warrant any important pollution, labor or biodiversity related risk. Similarly, the project does not involve any land acquisition while the concerned community or VO will voluntarily provide any piece of land for any of the above activities during implementation. Site selection of the proposed intervention will be based on community's consultation to avoid any risks while design will be climate resilient from the expected disasters. Because of the nature and size of activities, local people will

be engaged as laborers to earn for themselves and there will be no need for laborers from outside the project area. The project interventions do not involve any resettlement, there is neither cultural heritage, nor indigenous peoples in the project area.

5.2 Risk classification

The project is categorized as 'moderate' for the environmental and social risks.

Protected areas of the three districts are well documented (see the map developed by FAO in 20217 for the Protected areas in Sindh - <https://www.fao.org/3/cc4323en/cc4323en.pdf>). No project activities will take place in or near these areas, and no potential direct nor indirect impacts have been identified.

In addition to the ADB supported components of SCRP aim at restoring ecosystem services with green and grey infrastructures (forest restoration and drainage system).

Construction of small ponds (less than ½ acre) are planned under the project for water storage and aquaculture purposes. Ecosystems in these areas are already highly degraded, however, prior assessment and clear specification will guide the work of suppliers to prevent additional damage.

Support to farmer and fisherfolk communities will promote sustainable and climate resilient practices. Not environmentally sustainable production of living natural resources is not expected. Support to livestock and aquaculture will remind size-limited (3 to 5 small ruminants for family, aquaculture ponds or coastal sea farms of less than ½ acres). Manure and wastewater will be recovered for agricultural use.

Use of chemicals (fertilizers and pesticides) will be reduced and sustainably managed with (i) a participatory assessment of practices, (ii) training on compost, biocontrol, crop rotation, biopesticide, and other climate-smart practices encouraging farmers to reduce their dependency on input suppliers and use chemical only when needed.

In the three districts of the project, the only cultural heritage listed is the Historical Monuments at Makli concentrated around Thatta city (necropolis from the 14th to 18th century). No project activity will be carried out in this sub-urban area, therefore no direct nor indirect impact has been identified.

As in all rural areas, children regularly contribute to the work of the family farm. Information raising aimed at parents will be provided to remind the central role and priority of scholarship. Project suppliers are not expected to employ young people under the age of 18.

As in all rural areas, farmers of Sindh may be exposed to extreme weather and other OHS risks inherent to activities in the agriculture sector. Farmers and fisherfolks will be trained and made aware of these risks and how to mitigate them.

Influx of traffic is anticipated as minor and limited to the activities in relation to secondary road rehabilitation in isolated coastal communities. Adequate mitigation measures, including reinforced signaling to enhance safety will be assessed and implemented in these cases.

When the project can contribute to improved land agreement between landowners and sharecroppers/tenants, PMU will provide assistance to develop clear and appropriate agreement benefiting from the lessons learn of the FAO project "Improved Land Tenancy in Sindh Province" (<https://www.fao.org/documents/card/en?details=cc2179en>). Local committees will be put in place to manage eventual grievances/disagreements between landowners and sharecroppers/tenants (see the Grievance Redress Mechanism).

Women will represent at least 40% of the project's target population, and Component 2 targets specifically women in addition to youth. Thus, measures to prevent an increase in gender tensions will be embedded in the project activities.

The Project will support access to formal credit services for beneficiaries' production/income generation activities under two streams. Stream 1 to support provision of interest free subsidized loans to project beneficiaries, and Stream 2 through a partial credit guarantee instrument to cover the credit risk of the partner banks. This will be provided to lending financial institutions on a reducing basis over the Project period. Financial intermediaries will be selected during early implementation under a competitive process and specifications will include criteria related to the existence of a robust Environmental and Social Management System in line with SECAP requirements.

SCRIP is classified as 'substantial' for the climate risks.

Hazard identification: Project areas covered by SCRIP activities are experiencing flooding, cyclones, sea intrusion, droughts (less pronounced but the climate is already semi-arid in Sindh) and heat waves. The risk, vulnerability, intensity of these hazards on the concerned communities and ecosystems should be assessed with proper mitigation measures at the implementation stage.

Exposure Assessments: Poor and vulnerable rural populations will access program interventions in agricultural systems, livelihoods, and infrastructure. Given that crop production and fisheries are dependent on weather patterns and climatic events and the relatively low adaptive capacities of target populations, the climate risk is deemed substantial.

Sensitivity: Income earned from agricultural, livestock and fishing activities form the core livelihoods of the target groups covered by the project. Again, because revenues earned from crop production and other agricultural activities highly correlate with weather patterns and climatic events, beneficiaries covered by the project are climate sensitive. While the project expects to build the resilience of target populations to withstand the adversities of climate and other economic shocks, at baseline, low adaptive capacities characterize these populations.

Smallholder farmers and target groups display a moderate awareness of climate risks and related adaptive and mitigation measures. Project efforts to build the adaptive capacities of its beneficiaries must emphasize the need for disaster risk planning, climate resilient cropping, and reduced post-harvest losses, among other interventions that build the beneficiary's capacity to cope with, or recover from, the effects of climatic shock events.

Project outcomes may be adversely impacted by climate change and without the provision of effective adaptation measures, beneficiaries may face financial challenges, while the ecosystem and biodiversity may face degradation. Effective risk management and building adaptive capacities of households, infrastructure, communities, and ecosystems are imperative for the success of the project.

5.3 ESC Impacts & Mitigation measures

5.3.1 Biodiversity

Biodiversity and the environment in the three districts are severely affected by the agricultural sector, in particular due to major water withdrawals upstream from the Indus River Delta.

The ADB-linked project will contribute to restore ecosystem services and improve the water cycle to strengthen climate resilience of local communities. To the possible extent, UC and Village selection will be aligned with ADB supported infrastructure and needs for such infrastructure identified in the VO umbrella plans will be shared with ADB's Management Unit for consideration and inclusion under ADB financing. The best use of the forthcoming ADB supported green and grey infrastructures will be sought to boost sustainable productivity, improve climate resilience of local communities and provide job and market opportunities.

SCRIP will not implement any activities within protected areas as well as off protected coastal zones. PMU will regularly update the official list of protected areas provided by the Environment Protection Agency (SEPA). When project activities will be implemented near protected areas (official buffer zone), PMU will conduct assessments of direct/indirect impacts in line with existing management plans and ensure local stakeholder engagement (SEP) and relevant authorities mobilization suggested by SEPA. For activities with implications for biodiversity that cannot be avoided, identify mitigation measures in line with the Provincial Guidelines as per the Provincial Protection Act of 2014 and the requirements of Standard 1 of SECAP.

Assessments of direct and indirect impacts to biodiversity, ecosystems and services will be carried out in-house (with the Environment and Climate specialist of the PMU) in particular for activities under component 1 (interest group development plan and infrastructure). Given the foreseen limited size of planned infrastructure, Impact Assessment shouldn't be expected, but relevant provisions for contractors of infrastructures will be provided (via specification of tenders).

Given their key role under component 1, skills related to environment and ecosystem management of Implementing Partners will be analyzed by PMU at recruiting stage. Every year, IPs will be invited to assess their own work performance and impact.

IPs will be in charge, with possible service providers (including public services for agricultural extension and/or environment), to train Villages Organizations on ecosystem services, ecosystem maintenance and how agriculture can benefit from ecosystem and impact ecosystems, in particular where the ADB-supported infrastructure will be implemented. This will be done under the Umbrella Village Plan (UVP) of component 1.

Under the Business plan 4P development proposals of Component 1, farmers and fisherfolks will be assisted to adopt climate resilient and eco-friendly practices. Irrigation schemes will remain limited in size (less than 300 ha). The Sindh Irrigation Department will be involved to ensure sustainable investment and appropriate water management system. SCRIP's implementation will include construction of ponds, limited in size (less than ½ acres) for water storage and aquaculture, in areas where ecosystems are already

affected by the disruption of flows in the Indus River (sterile soils due to salinity, disappeared coastal lakes and wetland). Integrated water resources management principle will be observed by PMU, associated with water saving analyses. Suppliers of ponds will have to respect clear specifications to prevent damage to ecosystems.

Under component 2, supported training, jobs and income generating activities, a particular attention is paid to avoiding damage to the ecosystem (particularly in the provision of livestock to avoid overgrazing or waste-generating activities) and, on the contrary, to promoting environmentally friendly jobs/income generating activities (Green Jobs).

Under component 1, 2 and 3, innovation to adapt to saline environment will be promoted when feasible.

5.3.2 Resource Efficiency and Pollution Prevention

The planned infrastructures under sub-component 1.2 will be procured under appropriate certification and verification system in particular for the construction of secondary roads and landing-site.

Integrated water management will be adopted for aquaculture, irrigation and drinking water supply. When harvested, water will be stored during the flooding season and using wastewater for agriculture after treatment. All sources of water leakage will be controlled; laser leveling will be encouraged targeting farmers and landowners.

To prevent impacts on ecosystems, livestock provision, ponds for water storage, coastal ponds for aquaculture, as well as shellfish farms, net pens, and cages for offshore aquaculture, must initially be presented to the Sindh Environmental Protection Agency (SEPA) to determine the necessity for prior Environmental Impact Assessments (EIA) and Initial Environmental Examinations (IEE).

In the framework of SCRP, farmers, fisherfolk and landless communities will be encouraged to adopt climate-friendly and eco-friendly practices, in particular based on the Targeted Adaptation Assessment.

Under the Value Chain Business Plans (Component 1), the project will support farmers/fisherfolks in adopting sustainable practices, promoting climate smart agriculture, ecofriendly fishery and aquaculture. Soil fertility and pest control will be systematically considered (see Annex 2. Integrated Pest Management and Soil Fertility strategy in SCRP Annex 2. Integrated Pest Management and Soil Fertility strategy in SCRP): current situation will be analyzed with farmers (skills to identify plant pest, quality and quantity of pesticides used, equipment for application, efficiency of treatment), before providing adapted recommendations and advice, and strengthening capacities with sustainable practices from Climate-smart agriculture (such as biopesticides, biocontrol and crop rotation). Under such approach, chemicals will be used at the last resort with appropriate products and dosage. Where the VC plan leads to the use of agrochemicals (as a last resort), and technical support for pest control is formalized in a pest and fertilizer management plan (please refer to Annex 2). Similar approach will be used to address soil fertility, leading to consider alternative practices such as crop rotation compost production and application, intercropping, application of biochar, use of manure, growing legumes, developing agroecology, ...

Information will be given to farmers to avoid soil salinization and waterlogging with inappropriate irrigation practices. Use of agrometeorological service will be encouraged.

To deliver these technical supports, IPs may solicit extension service of the Department of Agriculture; Badin service will be considered for potential training of trainers, because of the recent support in climate-smart agriculture provided by FAO under the project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management – TIBCRAWM".

Landowners should be also informed of the benefices of such practices so that land agreement can be streamlined and encourage farmers to adopt these practices (having access to the same land for a longer period of time). Local agro-dealers will be contacted and trained so that they can inform farmers with adequate recommendations.

Production of compost, manure collection and application, production of biopesticides, can lead to job opportunities under Component 2.

Training to fisherfolks communities will complete support in terms infrastructure, to encourage sustainable practices (fishery management plans, fish grading, use of improved fishing gear technology. Landing sites will be equipped with oil disposal tanks managed by fisher communities). Promotion of improved stoves / solar stoves for fish smoking/drying will be encouraged and supported under sub-component 1.1 and 1.2.

Aquaculture development will be backed up by appropriate training (including period of internship on existing site) so that fisherfolks can become professional fish farmers with appropriate skill on water quality control and feed management.

Aquaculture ponds will be filled during flooding season and/or using brackish water with adapted species. Wastewater from aquaculture will be used for agricultural purpose. When possible, with experimented group, agriculture/aquaculture combined system will be tested and scaled-up.

Under the VC plan for marine aquaculture, environmentally friendly solutions will be promoted wherever possible such as Recirculating Aquaculture Systems (RAS), which utilize closed-loop systems to treat and reuse water, minimize environmental impact and allow for improved control over growing conditions; and Integrated Multi-Trophic Aquaculture (IMTA), which combining the farming of different species that have complementary roles in the ecosystem to improve sustainability and reduce waste.

Production of fodder in tidal areas will be tested and developed under Component 2 to limit overgrazing. Fodder storage capacities will be supported accordingly.

5.3.3 Labor and Working Conditions

As most of the rural area worldwide, child labour may exist in Sindh agricultural sector. Under the Village mobilization of component 1, parents will be sensitized to avoid child labour and prioritize first child scholarship and education. When working on the family farm outside school hours, children shouldn't be exposed to hazardous tasks (such as aquaculture, pest management) and their mobilization should be geared towards the acquisition of skills.

The working conditions of farmers and their families are difficult in Sindh and may be exposed to OHS. Farmers are regularly exposed to extreme temperatures in this semi-arid territory, as well as pesticides. The project is anticipated to mitigate these risks on workers, providing recommendations for good agricultural practices. Use of Personal Protective Equipment will be encouraged, as well as livestock prophylaxis and Veterinary services (C2). When constructed, ponds will be protected to prevent drowning.

If situations are reported, landowners will immediately be informed of the illegality of abusive requests made to sharecroppers. The tenant farmers concerned can receive support in taking legal action.

5.3.4 Community Health, Safety and Security

Throughout project implementation, specific measures to prevent and address risks related to gender-based violence (GBV) will be adopted. At a minimum, these should include the establishment of "confidential channels for reporting incidents and providing support" as well as appropriate grievance redress mechanisms. With established reporting protocols in place, any incidents of GBV occurring in the context of the project can be immediately addressed through confidential reporting and documentation. Other potential measures include:

1. Ensuring gender balance among project staff, especially those involved in service delivery.
2. Adapting facilities set-up and services delivery to ensure they are accessible, safe and convenient for women and girls, taking into consideration their age, disability status, and residency status.
3. Conducting regular consultations with women and girls, paying attention to groups who may be particularly vulnerable. This may require organizing women-only groups or focus group discussions, with female facilitators or staff, to ensure women have the possibility to flag their concerns and interests as freely as possible.
4. Creating an enabling environment for women's participation through the social mobilization process and appropriate and purposeful communication (for example, targeting religious and traditional leaders and influential community members to ensure there is buy-in on women's participation in the project's activities and potential risks of tension and conflict within households and communities are mitigated).
5. Mapping the existence of adequate services for survivors/affected persons

Furthermore, the PMU will ensure that contractors and suppliers include clear provisions regarding non-discrimination and prevention of sexual harassment and sexual abuse.

When appropriate, PMU will ensure that contractors establish traffic management system during construction of secondary road (Sub-component 1.2).

5.3.5 Resettlement

When the project can contribute to improved land agreement between landowners and sharecroppers/tenants, PMU will provide assistance to develop clear and appropriate agreement benefiting from the lessons learned of the FAO project "Improved Land Tenancy in Sindh Province" (<https://www.fao.org/documents/card/en?details=cc2179en>). Local

committees will be put in place to prevent grievance between landowners and sharecroppers/tenants (see the Grievance Redress Mechanism).

5.3.6 Financial intermediaries

Risks related to the mobilization of financial Institutions for microcredit are limited as financial institutions in Pakistan are familiar with Environmental and Social Management Systems. Furthermore, the financial institution will be selected through a competitive process including clear specification related to Environment and Social management Systems.

6 Institutional arrangements and Monitoring

To ensure the project meets the needs of local communities and builds on their strengths, consultation and participation of local stakeholders are necessary in project preparation, implementation, monitoring and reporting. Stakeholder engagement shall be free of intimidation or coercion, gender and youth inclusive and responsive, tailored to the needs of disadvantaged and vulnerable groups. Timely disclosure of relevant and adequate information, preferably in Sindhi, will be provided to stakeholders and made readily accessible. Documentation of stakeholder engagement processes will form part of project report submissions. Action plans (ESCMP, Stakeholder Engagement Plan) have been prepared, to incorporate stakeholder feedback, including a Grievance Redress Mechanism. The documents will be included as materials for periodic monitoring. A website dedicated to project implementation will be made and all information and action plans shall similarly be uploaded to the project website. If despite an official project GRM, stakeholders still need their concerns to be resolved in a fair and timely manner through an independent process, IFAD may be contacted by e-mail at SECAPcomplaints@ifad.org.

PMU will include an Environmental and Climate Change Specialist who will be in charge of implementing and monitoring the Environmental, Climate and Social Management Plan under the project. The Specialist will check and assess every relevant activity in the business plan and prepare a report recommending or rejecting the proposed intervention with proper justification and reasoning. Regular monitoring of activities with physical visits and feedback from district offices should be carried out with proper record and report to be summarized in the project progress reports including compliance status, challenges and issues.

SCRIP will also have district level units in each of the three selected districts to manage the related activities. However, implementing partners will be assisting and facilitating the implementation of mitigation and adaptation measures directly or indirectly through expert consultants.

Monitoring of SECAP performance assessment will be conducted by PMU on a semi-annual basis. Results of monitoring shall be disclosed to stakeholders and their feedback recorded and acted upon.

Materials to be prepared and assessed are:

- Records of community participation during project planning and implementation phases, including issues raised by target groups, how addressed, use of local languages where appropriate.
- Proof of environmental permit compliance on relevant activities.
- Reports on environmental and social management and monitoring activities.

- Reports on the monitoring and evaluation of private sector participation.
- Records of grievances received and the management process to completion, along with analysis of the grievance trends.
- Occurrence of climate extremes and associated disaster/risk measures.
- Disaggregated records on the participation of women and young people in all activities (ie. training/capacity building, consultations, and others).

7 Capacity Building

In general, climate change related awareness is there especially in the Agriculture and Fisheries Departments while awareness and experience about the adaptation and mitigation measures is limited. The ongoing GCF/FAO project (TIBCRAW) is implementing climate smart agriculture interventions in Badin district and has transferred knowledge and expertise to the concerned government department staff through classroom training and field implementation. This staff could be considered as potential training of trainers for other extension services. Farmers groups may be more advance in climate smart agriculture in Badin as well than in the other two districts. Thus, appropriate peer to per exchange could be organized accordingly. Overall, the following capacity building activities are needed to be organized for the implementing agencies and partners, target and interest groups.

Within the framework of the CPRS, the training provided to village organisations, interest groups and individuals must first take into account existing knowledge and practices, as well as the bottlenecks that hinder change.

8 ESCMP Matrix

The ESCMP Matrix provides details of the concerned impacts and their mitigation measures. Consultation regarding different impacts and their mitigation measures among the involved stakeholders will be key to the effective implementation. Overall, PMU and Social Mobilization Partners (SMP) will be responsible for the implementation of ESCMP while concerned government departments like Agriculture, Fisheries and Coastal Development will be supporting the project in the target districts. VOs and other interest groups will also play their roles in their respective and relevant activities. All the activities will be regularly monitored through activity and periodic progress reports.

ESCMP Matrix

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
1. Biodiversity						
Threat to or loss of biodiversity, natural resources, ecosystems and ecosystem services	<p>1.1 <i>Ensure complementarity with the ADB-supported component of SCRP aiming at restoring ecosystem services and strengthening climate-resilience of local communities.</i></p> <p>1.2 <i>Update the list of protected areas in the three districts of the project.</i></p> <p>1.3 <i>Avoid all project activities in protected areas.</i></p> <p>1.4 <i>For activities near protected areas (buffer zone), conduct an assessment of direct/indirect impacts on the protected areas, in line with existing management plans and ensure adequate stakeholder engagement with relevant authorities/management bodies.</i></p> <p>1.5 <i>Conduct assessments of direct and indirect impacts to biodiversity, ecosystems and services where the project will be implemented (Villages level) to identify the need for mitigation measures, applying the precautionary principle and following the mitigation hierarchy.</i></p> <p>1.6 <i>For activities with implications for biodiversity that cannot be avoided, identify mitigation measures in line with the Provincial Guidelines as per the Provincial Protection Act of 2014 and the requirements of Standard 1 of SECAP.</i></p>	<ul style="list-style-type: none"> • Sindh Environment Protection Agency (SEPA) • Meetings with Village Organizations, rural support organizations and sub-groups for all three Districts in the context of the Stakeholder Engagement Plan (SEP) activities. 	PMU	<ul style="list-style-type: none"> • Sub-project screenings and assessments • Semi-annual Monitoring Reports • Land use map and GIS activities screening 	Annual	In-house

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	<p>1.7 Consult with local stakeholders on the outcomes of the assessments in the context of the activities of the SEP (stakeholder Engagement Plan).</p> <p>1.8 Ensure inclusion of relevant provisions for contractors of infrastructures based on the results of the assessments (1.4 and 1.5).</p>					
	<p>1.9 Control the environmental and ecosystems skill of Implementation Partners (specification in the tenders, field visit), provide training courses and invite IPs to assess their own work performance and impact.</p>	<ul style="list-style-type: none"> • IPs 	PMU	<ul style="list-style-type: none"> • Activity/ accomplishment reports • Annual Reports 	Initial and annual	In-house
	<p>1.10 As part as local mobilization, Communities will be trained on ecosystem services, ecosystem maintenance and how agriculture can benefit from ecosystem and impact ecosystems, in particular where the ADB-supported infrastructure will be implemented.</p> <p>1.11 Awareness raising on incidental take of wildlife</p>	<ul style="list-style-type: none"> • Meetings with sub-groups and VOs and other stakeholders as relevant • Agriculture Department and farmers • Fisheries Department and Fisherfolk. 		<ul style="list-style-type: none"> • Activity/ accomplishment reports • Monitoring reports • Annual Reports 		
	<p>1.12 Communities will be consulted and sensitized on the need to conserve biodiversity and engaged in all such efforts.</p>	<ul style="list-style-type: none"> • Meetings with sub-groups and VOs and other stakeholders as relevant 	PMU	<ul style="list-style-type: none"> • Progress reports on stakeholder engagement activities 	Bi-annual	Integrated in the project's budget
	<p>1.13 Mainstream ecosystem-friendly activities into Value Chain plans (C1) and Income generation for young people (C2) Including training on efficient use of resources, climate-smart agriculture and aquaculture and</p>	<ul style="list-style-type: none"> • Key informant interviews • Meetings with sub-groups, VOs and NGOs. 		<ul style="list-style-type: none"> • Activity/ accomplishment reports 		

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	<i>principles in relation to pest management and soil fertility, in line with relevant activities in each project site.</i>					
	1.14 <i>Calls for tenders for ponds will set clear guidelines to avoid damaging mangrove and wetland</i>	<ul style="list-style-type: none"> • Tender specifications for contractors 		<ul style="list-style-type: none"> • Call for tenders 	Each tender for ponds	
	1.15 <i>Under Component 2 and 3, innovation to adapt to saline environment will be promoted</i>	<ul style="list-style-type: none"> • 		<ul style="list-style-type: none"> • 		
2. Resource Efficiency and Pollution Prevention						
Unsustainable use/production of natural resources	2.1 <i>Procure natural-resource commodities certified under appropriate certification and verification systems</i> 2.2 <i>Extraction of construction aggregates only from approved quarry sites</i> 2.3 <i>Limit to suppliers that can demonstrate that they are not contributing to significant conversion or degradation of natural or critical habitats</i> 2.4 <i>Application of integrated water resources management principles for all promoted activities</i> 2.5 <i>Promote water saving approaches and improving water use efficiencies where relevant</i>	<ul style="list-style-type: none"> • SEP • Tender specifications (using ecolabel and environmental product declaration) • Agr. Extension • Input interest groups, VOs including smallholders 	PIU, Local Government Units	<ul style="list-style-type: none"> • Annual Reports • Activity Reports • Call for tenders 	Quarterly	Lodged with Contractor
Pollution of ecosystems and water bodies, biodiversity losses due to inappropriate	2.6 <i>Provide training or capacity-building on proper selection, distribution, storage, application, and disposal of pesticides (including biopesticides)</i>	<ul style="list-style-type: none"> • VC interest groups, including landowners • Agricultural Extension service 	PMU	<ul style="list-style-type: none"> • Activity Reports • Management Plan 	Bi-annual	Integrated in the project's budget C1

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
use of agri-chemicals (fertilizers and pesticides)	<i>and fertilizers (including compost) _ see the annex 2 on agrochemical in the ESMCP note_. Where agrochemicals are necessary, an integrated pest and fertilization management plan is prepared following this annex.</i>					
	2.7 <i>Provide adequate training to agro-dealers on the specifications and quality control of agro-chemicals</i>	<ul style="list-style-type: none"> Fertilizers and agro-chemical dealers. Agr. Extension Department 	PIU	<ul style="list-style-type: none"> Activity reports 	Bi- Annual	
	2.8 <i>Awareness raising activities about the advantages and opportunities provided by agroecology and climate-smart agriculture to landowners for efficient water use, quality seeds and best agronomical practices</i>	<ul style="list-style-type: none"> Agr. Extension, Social Mobilization Partners (SMP) Input Interest Groups and land owners 	PMU and SMP	<ul style="list-style-type: none"> Activity and progress reports 	Bi-annual	
	2.9 <i>Conduct activities to manage soil salinity:</i> <ul style="list-style-type: none"> Test soil for electrical conductance (EC) to determine the extent of the problem at sub-project/site level Identify salt-tolerant crops and fodder Reduce excess water to control excess salt movement Ensure use irrigation water and drainage systems to wash salts down the soil profile. Develop site-specific management plans 	<ul style="list-style-type: none"> Agr. Extension, VOs, landowners 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	
	2.10 <i>Explore the implementation of agriculture/aquaculture combined systems</i>	<ul style="list-style-type: none"> Agr. Extension, Fisheries Department, Fisherfolk and VOs. 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
risk of overfishing and fishing related pollutions	2.11 Development of a comprehensive and accurate baseline information on fish stocks + predicting potential impacts of fisheries operations, and evaluating the significance of these impacts	<ul style="list-style-type: none"> Sindh Livestock and fishery SEP PMU/PIU ADB 	PMU	<ul style="list-style-type: none"> Annual reports Activities reports 	Annual	Lodged in C3
	2.12 Develop fishery management plans for optimum sustained yields at concerned VO level.	<ul style="list-style-type: none"> Fisheries Department VOs 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	
	2.13 <i>Training</i> on fish grading and processing of fish-waste for fish feed in aquaculture production	<ul style="list-style-type: none"> Fisheries Department VOs 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	
	2.14 <i>Training</i> and awareness raising of fishers and vessel operators (on damage due to fishing equipment and practices)	<ul style="list-style-type: none"> Fisheries Department VOs Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	
	2.15 <i>Promotion</i> of selective fishing gear and improved fishing gear technology	<ul style="list-style-type: none"> Fisheries Department Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	
	2.16 <i>Provision</i> of oil disposal sites	<ul style="list-style-type: none"> Fisheries Department VOs Boat owners and operators 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	
	2.17 Promoting energy-efficient stoves for fish smoking and other equipment for fish drying	<ul style="list-style-type: none"> Fisheries Department VOs Fishers 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	
	2.18 Mobilizing fisherfolks organizations/cooperatives and/or <i>promoting</i> their creation	<ul style="list-style-type: none"> Fisheries Department Concerned VOs 	PMU and SMP	<ul style="list-style-type: none"> progress reports 	Bi-annual	

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	2.19 Improvement of the Fish Value Chain (landing sites, <i>climate</i> -smart cold chains, access roads to landing sites) with the development of ecolabel	<ul style="list-style-type: none"> Fisheries Department Sindh Coastal Development Department. Fisherfolk 		<ul style="list-style-type: none"> progress reports 		
Pollution of waterbodies due to fishing nets and equipment	2.20 <i>Conduct</i> training on pollution reduction in fishing practices and promotion of natural materials for fishing <i>nets</i>	SEP	PMU	<ul style="list-style-type: none"> Activity Reports Annual reports 	annual	Integrated in the project's budget
Development of aquaculture production with related risks	<p>2.21 Consult SEPA to ensure compliance with the necessary Environmental Impact Assessments (EIAs) or Initial Environmental Examinations (IEEs) for both inland and offshore aquaculture systems.</p> <p>2.22 Siting fishponds and drawing up development plans that <i>ensure</i> equitable distribution of land and water resources among different users</p> <p>2.23 <i>Adopting</i> climate-proof fish farming facilities</p> <p>2.24 Ensure adequate pond water exchange and flushing <i>systems</i> and dilution or treatment of pond water prior to release and promote and test integrated agriculture/aquaculture systems</p> <p>2.25 Where possible use Integrated Multi-Trophic Aquaculture (IMTA) and Recirculating Aquaculture Systems (RAS) for offshore aquaculture.</p> <p>2.26 Ensure careful application of feeds, fertilizers and other <i>inputs</i> based on recommended standards to avoid excess usage and water pollution.</p>	<ul style="list-style-type: none"> Villages authorities and local communities Sindh Livestock and fishery Department SCMs Private sector in fishery industry 	PMU	<ul style="list-style-type: none"> Annual reports Activities reports 	Annual	Lodged in C1

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	<p>2.27 <i>Regularly</i> monitor water quality in ponds and the wider environment to ensure that it meets required standards for the safe production of fish and aquaculture products. Special attention must be paid to excessive use of antibiotics.</p> <p>2.28 <i>Advocating</i> for eco-labelling fish farming products</p> <p>2.29 Ensure adequate training and support to fish farmers, especially to former fisherfolks</p> <p>2.30 <i>Collection</i> of the generated waste</p>					
Extraction, diversion or contaminated water	<p>2.31 <i>Recycling</i> and storing drainage water</p> <p>2.32 <i>Promote limited</i> irrigation system schemes</p> <p>2.33 Promoting water-saving approaches and improving water-use efficiencies in all sectors (incl. laser leveling technologies and soil-water conservation measures)</p> <p>2.34 Applying technical resource-efficiency measures such as <i>reverse-osmosis-based</i> water recovery</p> <p>2.35 Application of integrated water resources management <i>principles</i>. Promoting the preservation of water quality (integrated pest management and integrated soil fertility management to minimize the use of agrochemicals; proper treatment of wastewater before it is discarded)</p> <p>2.36 Training on the importance of ecosystem services and <i>natural</i> water cycle, including the adequate ecological flows</p>	<ul style="list-style-type: none"> • Sindh Irrigation Department • Sindh Livestock and fishery Department • PMU/PIU ADB • VOs, farmers and aquaculturists 	PMU	<ul style="list-style-type: none"> • Activities reports 	Bi-annual	

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	2.37 <i>Abbrev.</i> Impact assessment studies in case of rehabilitation/new irrigation scheme (in consultation with SEPA)					
3. Cultural Heritage – Not Applicable						
4. Indigenous Peoples – Not Applicable						
5. Labor and Working Conditions						
Working conditions that do not meet national labor laws or international commitments (e.g. discriminatory practices)	5.1 Raising awareness about child farm labour at farm level as part of the social mobilization 5.2 Identify hazardous/dangerous practices where children participation will be restricted (such as aquaculture and risk of drowning)	<ul style="list-style-type: none"> • SEP, FGDs, KII, IPs 	PMU	<ul style="list-style-type: none"> • SECAP • Monitoring Reports • Activity Reports • Accomplishment reports • Annual reports 	Bi-annual	Integrated into project
OHS risks	5.3 Apply the precautionary principle and mitigation hierarchy related to working conditions 5.4 Monitor all management and mitigation measures put in place by contractors/third-party workers 5.5 Raising awareness about farm labour under heat waves and other extreme water conditions (session to organize during Climate Smart Agriculture training) 5.6 Raising awareness about the safety risk related to chemicals such as pesticides, promote alternative approach for crop protection (crop rotation, biopesticides) and, if needed, support acquisition of appropriate equipment for	<ul style="list-style-type: none"> • VOs • Extension services • local IPs • farmers & fisherfolks 	PMU CDU	<ul style="list-style-type: none"> • Monitoring Reports • Activity Reports 	Bi-annual	Integrated into project

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	chemical application (session to organize during Climate Smart Agriculture training) 5.7 Inform landowners about forced work and abusive requests to sharecroppers					
6. Community Health, Safety and Security						
Risk of increase in vector-borne (ie malaria), water-borne (ie hepatitis) and other communicable diseases (i.e. Covid, AIDS)	6.1 Identify closest medical services 6.2 Promote hygiene and health practices in relation to project activities (in particular when livestock and drinking water provision)	• SCM, KII	PMU	<ul style="list-style-type: none"> • SECAP, • Annual reports, • RHU advisories • Accomplishment reports 	Bi-annual	In-house
Potential increase of gender-based violence, including sexual harassment, exploitation and abuse in project areas	6.3 Adopt a “Do No Harm” approach and develop a gender strategy that will include specific actions to mitigate risks of Gender-Based Violence due to project initiatives in line with the Government of Sindh Sexual Violence Response Framework 2020-2024 and the Sindh Commission On The Status Of Women 2022-2024 Strategic Plan 6.4 Sensitize project beneficiaries of the grievance redress mechanism 6.5 Ensure gender balance among project staff, especially those involved in service delivery 6.6 Adapt facilities set-up and services delivery to ensure they are accessible, safe and convenient for women and girls, taking into consideration their age, disability status, and residency status 6.7 Conduct regular consultations with women and girls, paying attention to groups who may be particularly vulnerable. This may require	• KII	PMU	<ul style="list-style-type: none"> • SECAP • Activity reports 	Annual	In-house

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	<p>organizing women-only groups of focus group discussions, with female facilitators or staff, to ensure women have the possibility to flag their concerns and interests as freely as possible</p> <p>6.8 Create an enabling environment for women’s participation through the social mobilization process and appropriate and purposeful communication (for example, targeting religious and traditional leaders and influential community members to ensure there is buy-in on women’s participation in the project’s activities and potential risks of tension and conflict within households and communities are mitigated</p> <p>6.9 Map the existence of adequate services for survivors/affected persons</p> <p>6.10 Ensure that contractors and suppliers include clear provisions regarding non-discrimination and prevention of sexual harassment and sexual abuse</p>					
Increase or alteration of traffic in project and neighboring areas.	<p>6.11 Road safety assessment</p> <p>6.12 Appropriate signaling</p> <p>6.13 Contractors to establish traffic management system during construction</p> <p>6.14 Establish GRM</p> <p>6.15 Coordinate with ADB</p>	<ul style="list-style-type: none"> • SCM, KII, ADB PMU 	PMU	<ul style="list-style-type: none"> • Road Safety Assessment • Consultation Documentation • Annual reports 	annual	Lodged with Contractor
7. Resettlement						

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
Conflicts due to change in land-tenure arrangements	7.1 Stakeholder engagement (including sensitization of landowners) 7.2 Local committees established to address issues	<ul style="list-style-type: none"> • VOs • Landowners • IPs 	PMU, CDU	•		
8. Financial intermediaries						
Financial intermediaries do not implement E&S safeguards to adequately support investments	8.1 Ensure financial intermediaries prepare and implement adequate ESMS in line with SECAP policies prior to onlending activities	<ul style="list-style-type: none"> • Meetings • Trainings • Tender specification • Due diligence before contractualization 	PMU	<ul style="list-style-type: none"> • Activity Reports • Management Plan • Monitoring reports • ESCMP of the selected financial institution 	Bi-annual	
9. Others						
Lack of active participation from vulnerable groups	9.1 During inception, review the SEP and GRM to update stakeholder matrix, engagement activities and GRM to ensure the establishment and maintenance of accessible and culturally and socially appropriate consultations	<ul style="list-style-type: none"> • Workshops and meetings 	PMU	<ul style="list-style-type: none"> • IEC Reports • GRM Reports • IEC materials • Meeting reports • Accomplishment reports / annual Reports 	Bi-annual	
	9.2 Induction sessions with local communities and documentation of how the feedback received informed project activities	<ul style="list-style-type: none"> • SCMs, meetings, FFS 		<ul style="list-style-type: none"> • Minutes and progress reports on SEP with a specific session on feedback from stakeholders and how it informed was integrated in the project. 	Bi-annual	
	9.3 Validate activities with local communities to ensure relevance and adequacy to local customs and conditions				•	

Environmental/ Social and climate Impacts	Recommended Mitigation/ Enhancement measures	Public Consultation Activities	Responsible Institution in Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (\$)
	9.4 Ensuring all stakeholder engagements include representation from the youth	<ul style="list-style-type: none"> Stakeholder Engagement Meetings 	PMU	<ul style="list-style-type: none"> Meeting minutes and attendance sheet with distinction of youth/women/other categories attending events. 		

Annex 1. ESCMP implementation guidelines at early stage of the project

The initial implementation of the SCRIP will lead to the selection of villages, followed by the selection of value chains and the corresponding development plan. VC plans can thus be considered as subprojects; the current ESCMP analysis and matrix must serve as guidance to develop adapted and more concrete mitigation measures. Below are listed some guidelines to ensure that appropriate management plans are drawn up at subproject level. Furthermore, the PMU will have then to ensure that the proposed mitigation measures are included in the AWPB/costing and the M&E system.

Biodiversity:

Protected areas [related to mitigation measures 1.1 to 1.8]

1. Contact the Sindh Environment Protection Agency (SEPA) to obtain an updated list of protected areas in the three districts (including coastal and marine areas), their location and the contact details of the authorities responsible for managing them.
2. Check the localization of selected villages and their proximity to protected areas. When the distance from a protected area is less than 10 km, contact the management authority for this protected area. Under the supervision of the management authority, conduct an assessment of direct/indirect impacts of project activities (VC plans, planned infrastructures) and check the need for Environmental Impact Assessments (EIA) and Initial Environmental Examinations (IEE). Consult with local communities to ensure inclusion and ownership.

Ecosystems [related to mitigation measures 1.10 to 1.15 + 2.5]

3. In each village, depending on its biodiversity and ecosystem context, IPs must draw the attention of the village community on ecosystem fragility, and the impacts of their economic activities. How income generation at village level is linked to ecosystem should be highlighted. PMU is invited to check training proposals of the IPs. Information provided shouldn't be theoretical but applied to the context to invite farmers/local communities to re-consider some of the practices affecting, at long term, these communities. Water use and water saving at household level should be considered (agricultural water and irrigation to consider under VC plan).
4. Check training proposals of the IPs. Information provided shouldn't be theoretical but applied to the context to invite farmers/local communities to re-consider some of the practices affecting, at long term, these communities. This supposes IPs can analysis current context (practices, ecosystem fragilities).

Resource Efficiency and Pollution Prevention:

CSA and Agricultural practices [related to mitigation measures 2.8 to 2.11]

5. An important stream of component 1 is to improve agricultural practices under the VC plans, with Climate Smart Agriculture and Agroecological approaches. The PMU is invited to provide an update on this issue in Sindh and identify key competences. To this end, PMU

should contact various partners: (1) the Institute of Environmental Studies and the Department of Agriculture at Karachi University, (2) the Department of Soil Science and the Department of Energy and Environment at Sindh Agriculture University, FAO and its offices in Sindh based in Hyderâbâd, (3) the Department of Agriculture, Supply, and Prices, its Directorate General Agriculture Extension Sindh, its ICT Agricultural Extension Services Center Sindh TIBCRAWM”).

6. PMU should meet the extension service in Badin. These Officers have been trained and supported in climate-smart agriculture by FAO under the project “Transforming the Indus Basin with Climate Resilient Agriculture and Water Management”. Lessons learnt from this training and related extension implementation to farmers should be analyzed to develop training and advice on CSA under SCRIP. The extension service in Badin could be a relevant strategic partner to ensure training of trainers toward Thatta and Sujawal.
7. The skills of IPs providing support to VOs, with regards of CSA, should be carefully assess and if necessary, training provided by the above-mentioned partners.
8. These same contacts listed above (at 1.) should be also consulted on saline agriculture; the various proposals on saline agriculture developed in the SECAP note and the present note should be explored and elaborate (salt-tolerant crops and fodder; improved drainage and water management at field level)

Crop Pest and soil fertility management [related to mitigation measures 2.8 to 2.11]

9. See annexe 2

Fishing activities [related to mitigation measures 2.12 to 2.21]

10. Once the fishing villages have been selected, PMU based on local consultation, PMU should elaborate the proposed mitigation measures in parallel to the design of the VC plan
11. Mitigation measures listed in the ESMP should be further discuss and assess with the Sindh Fisheries Department of the government of Sindh as well as WWF (Mr. Altaaf Sheikh. Snr Manager Conservation in Sindh)

Aquaculture [related to mitigation measures 2.22 to 2.29]

12. Impact assessment of aquaculture project should be guided by a prior Environmental and Social Impact Assessment. SEPA can provide the threshold above which such assessments are mandatory.

Irrigation [related to mitigation measures 2.30 to 2.36]

13. Once subprojects leading to water extraction, irrigation, drainage and water supply, Sindh Irrigation and Drainage Authority (SIDA) should be consulted to finetune related mitigation measure and draw up adapted management plan during and after works.
14. Impact assessment of new irrigation schemes should be guided by a prior Environmental and Social Impact Assessment. SEPA can provide the threshold above which such assessments are mandatory.

Labour and working conditions

Labour risks [related to mitigation measures 5.1 to 5.7]

15. Once the village and CV have been selected, PMU shall carry out a more in-depth assessment of the risks associated with the work and working conditions and, if substantial or high risks are raised, carry out a Labor Assessment Management Plan (LAMP) including:
 - Overview of labour use in the project: Number of project workers, Characteristics of project workers, Timing of labour requirements, Contracted workers, Migrant workers
 - Assessment of key potential labour risks: description of the activities and related labor risks (hazardous tasks, child labor, forced labor, discriminatory practices, restrictions of freedoms of collective bargaining, presence of migrant and seasonal workers, potential labor influx, potential gender-based violence, limited implementation of OHS requirements)
 - Brief overview of labour legislation (terms and conditions, and OSH)
 - Policies and procedures applicable for the project (including terms and conditions, grievance mechanism for workers)
 - Suggested training

Annex 2. Integrated Pest Management and Soil Fertility strategy in SCRP

Note for the PMU

Context

IFAD promotes the safe use of pesticides and fertilizers by ensuring that all projects include appropriate investments and capacity-building activities for the selection, distribution, storage, application and disposal of pesticides and fertilizers. This commitment covers coordinated use of pest and environmental information; pest and vector control methods; appropriate cultural practices; and biological, genetic (and as a last resort) chemical means to prevent unacceptable levels of pest damage. Where recourse to pesticide use is necessary, IFAD will ensure safe, effective and environmentally sound pest management in line with the World Health Organization (WHO) and Food and Agriculture Organization of the United Nations (FAO) International Code of Conduct on Pesticide Management.

In the case on SCRP, farmers, grouped under Producer/Interest Groups, will be supported to implement Value Chain plan (Component 1). Examples of Value Chain plan include crops production, high value crops that are nutritionally superior and climate-resilient, products aggregation, integrated farming (agriculture, livestock and fish), value addition and marketing, agri service provision, livestock for meat/fattening, dairy production, marketing, value addition, fisheries, aquaculture, mariculture, fisheries processing, preservation, grading, marketing, traditional crafts production/marketing etc.

Based on the value chain plan of each production, related interest groups will be supported through training and subsidised loans. The objective is to help people to be more resilience, thus analyse their situation, strengthen their professional network and adopt the best options with long term perspective. They need to fully understand the processes and practices for realization of the VC plans' objectives. Depending on the subject, training & supports will be delivered by IPs specialists, partner extension agencies and external specialized agencies like FAO in locations that are also accessible and safe for women. The trainings may cover, but are not restricted to, production practices and/or technologies, grading and packaging, aggregation and marketing, value addition/processing, adoption of higher value crops, selection of crops based on the income-earning potential, nutritional-superiority and climate resilience, efficient input use, climate adaptation, water conservation and efficiency, post-harvest loss reduction, off-shore/inland aquaculture (fish, shrimp, crab), farm services provision, off-farm income generation, traditional crafts, financial literacy, nutrition etc.

Where the value chain involves the use of pesticides and fertilisers in cultivation practices, IPs will support Producer/Interest Groups in Pest and Fertilizer management. The aim of this support is manifold: (i) to reduce the risk of environmental pollution, (ii) to improve occupational health and safety, (iii) to improve crop and soil health leading to better productivity, (iv) to reduce farmers' production costs, (v) to reduce farmer's technical and economic dependence on agrochemical suppliers.

Suggested approach:

The objective is to empower farmers in terms of pest and fertiliser management:

- (i) to understand the perception of the farmers regarding the pest pressure and the issue of soil fertility (current situation and past trends);
- (ii) to clarify the current practices with agrochemicals:
 - what agrochemicals are used (fertilisers, pesticides)?
 - where are they bought?
 - what is their quality (independent analysis should be carried out, as many claims are made about the dilution of agrochemicals before they are put on sale)?
 - do they respect Pakistan authorisations to use and market?
 - what are their prices?
 - what is the farmers' decision system for using agrochemicals (fertilizers and pesticides)? (and are they different from one farmer to another)?
 - what are their efficiency at field level (according to farmers)?
 - how they are used and spread by farmers (frequency, preparation, equipment, PPE)?
 - whether any illnesses have been observed as a result of their use (including whether any children have been found to be mentally handicapped)

All these questions and answers aim at (1) getting farmers to reflect and analyse their own practices; (2) for IPs to prepare their training based on farmers' needs and help them to understand their own challenge; propose to farmers integrated pest management plan and fertilization strategies based on organic practices as far as possible, meeting technical needs, economic objectives (links to the VC plan), and reducing health and environmental risks.

IPs will provide training for farmers

- (iii) to be aware of risk for the environment and human health related to agrochemicals;
- (iv) to recognize the main pests and diseases affecting their crops;
- (v) to learn the possible strategies to reduce pressure of pest (crop rotation, crop association, biocontrol);
- (vi) to learn basis about soil and the possible strategies to improve soil fertility (including role of legume for fertilization and advantages of agroforestry);
- (vii) to learn how to produce their own biopesticides and fertilizers (with possible link to Component 2 as job opportunities);
- (viii) to draw up an integrated pest management plan and fertilization strategy adapted to their VC plan including objective in terms of yield and quality, and advise on adapted equipment and PPE
- (ix) to develop renewed relationship with agrochemical providers.

This initial phase could last 6 months and be developed in each village, grouping various Interested groups and VC plan. Some Farmer leaders should be identified to facilitate local support to Interest group members, host farmer field school sessions, ensure basic record and monitoring to report to the group regarding the VP plan objectives.

It is proposed that IPs could keep on in this support with (1) regular technical visits; (2) peer-to-peer sessions mixing various Interest groups to share their experience, results and practices through peer-to-peer session; (3) consultation with agro-dealers on the specifications and quality control of agrochemicals so that suppliers are able to provide adapted products and equipment (represents of farmers should be included in this process), check of their license to sale agrochemicals, suggest adapted training.

Where the use of agrochemicals is planned under the VC plans, based on the above, IPs will prepare and integrated pest and nutrient management plan (for PMU and for farmers):

- (1) main pest and disease for the crops considered under the VC plan
- (2) strategies to reduce pest pressure
- (3) possible biopesticides (preparation, dosage, frequency of treatment, equipment including PPE)
- (4) as a last resort recommended pesticides complying with regulation (dosage, frequency of treatment, equipment including PPE, advice for buying on the market)
- (5) nutrient requirements and strategies to improve soil fertility
- (6) possible biofertilizers (preparation, dosage, frequency of application, equipment)
- (7) as a last resort recommended chemical fertilizers (advice for buying on the market)
- (8) monitoring and control; and estimated cost (for PMU)

IPs requirement

- Good technical level on pest management and soil fertility
- Experience in the context of Sindh agriculture sector (including input providers)
- Capacities to organise regular field visit and training session

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex: SECAP - Annex SEP_Stakeholder Engagement Plan

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

ANNEX-B

SINDH COASTAL RESILIENCE PROJECT

**SOCIAL, ENVIRONMENTAL AND CLIMATE
ASSESSMENT PROCEDURES (SECAP)**

**STAKEHOLDERS ENGAGEMENT PLAN (SEP)
&
GRIEVANCE REDRESS MECHANISM (GRM)**

JANUARY 2024

INTRODUCTION

Project Rationale

1. Pakistan is the world's 5th most populous country with a population of 240 million inhabitants (2022 census) out of which 63 percent is rural. Sindh is the second most populous province in Pakistan with a population of 55.7 million. Sindh has a well-developed agricultural base supported by an extensive irrigation network on the Indus River. With its 350 km coastline, Sindh has 48 percent share in fish export from Pakistan. Agriculture contributes 24 percent to Sindh GDP and generates 70 percent of the employment. Livestock and fisheries contribute over 50 percent of the agriculture GDP of the province. The poor derive 56 percent of their income from agriculture.¹ Livestock provides critical income security for many rural households and is of particular importance to women². People lack clear land tenure rights and most of the poor smallholders depend on landowners and middlemen. In addition, the sector is facing alarming ecosystem degradation due to pollution, deforestation, and upstream massive water withdrawals in the Indus basin, leading, among others, to sea intrusion and salinisation. Climate change raises smallholder vulnerability, with episodes of heatwaves, floods, and cyclones in the arid context of Sindh coastal area.
2. Despite its resource endowments, Sindh is afflicted with large pockets of endemic poverty, particularly in rural areas. In Sindh, about 30-35 percent of the population lives below the poverty line. The prevalence of undernourishment and stunting in children under five in Sindh is 34 percent and 45.5 percent respectively and exceed the national averages of 20 percent and 40 percent respectively³.
3. IFAD will be financing the Sindh Coastal Resilience Project (SCRIP) in the three poorest districts with a population of 3.87 million/697,262 households or 7 percent of the provincial population. The three districts namely Thatta, Sujawal and Badin are recognized as the most deprived and under-developed with a multi-dimensional poverty headcount respectively of 86, 85, 82 percent⁴. Of the landowners, 84 percent own less than 25 acres⁵. A very small population of the three districts own land which is 2.2% households in Thatta, 0.4% in Sujawal and 4.3% in Badin⁶. Small holdings, traditional low input low-output production systems, lack of access to technology, services and financial services, and small and scattered marketable surpluses keep performance of smallholder farming below potential. Coastal fishermen communities are the most deprived in terms of productive assets and social infrastructure/services. 76 percent rural

1. _____

¹ Rana, W. (2019): Creating fiscal space for enhancing public investment in Sindh agriculture sector. PACE policy research paper.

² World Bank (2022): *Pakistan Country Climate and Development Report*. Washington, DC.

³ FAO, WFP, WHO, UNICEF (2020): *Pakistan Overview of Food Security and Nutrition*.

⁴ Sindh Districts Profile, P&D Department, Sindh

⁵ Pakistan Bureau of Statistics.

⁶ Sindh Districts Profile 2021, P&D Department, Sindh.

households are landless and work as tenants/sharecroppers and working on land owned by a large landowner as tenants⁷.

Project Development Objective and Project Components

4. The Project development objective is to promote inclusive and resilient livelihoods for target farming and fishing communities and disadvantaged groups. This will be achieved through three outcomes: (i) Improved production under climate smart agriculture and fisheries production plans leading to 4P based value chain development that facilitate integration with markets and services; (ii) Increased self-employment and employment opportunities for disadvantaged groups (youth, women, landless); (iii) A participatory, community owned and driven approach linked to an enabling policy and institutional environment that facilitates access to natural resources and support services.
5. Project Components: SCRP will have an inclusive approach to transformation of economies and incomes in the target rural communities. The project consists of three complementary components that address the causes of poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.
 - Transformation of Coastal Rural Incomes: Rural communities organized and assisted to develop capacities for market oriented improved productivity and production and value addition and transition to higher value outputs/products based on structured value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.
 - Economic and social Inclusion of Disadvantaged Groups (job market and value chain participation facilitated for the poor landless households, in particular young men and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored enterprise development and technical and vocational service provision).
 - Project Management and Policy Support: Establishment of an efficient project management structure (a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing in buffer zone etc.).

1. _____

⁷ Profile of Land Tenure System in Pakistan, 2015. <https://piler.org.pk/wp-content/uploads/2017/02/KB-Report-corrected-compressed.pdf>

Purpose of the SEP

6. The purpose of this Stakeholder Engagement Plan (SEP) is to prepare a strategy and a plan for consultation with the Project stakeholders, obtain their perception and feedback on project interventions, proposed mitigation and adaptation measures to address the potential project risks, and their views and recommendation on the Project interventions. SEP is also a lever to ensure the project meet the needs of the population and involves them fully.

OBJECTIVE OF SEP

7. The SEP is aimed at consulting about Project information concerning objectives, interventions, outcomes and impacts on the target communities including climate change and environmental impacts and obtain their feedback on the overall implementation and mitigation plan for the project. The consultation process will provide the stakeholders with an opportunity to inform and influence decision-making on the project interventions including effective grievance redress procedures. Stakeholders' engagement will ensure transparency in project activities and create a sense of ownership among all concerned.

STAKEHOLDER IDENTIFICATION AND ANALYSIS

Affected Parties

8. SCRP will involve and affect many people. Small holder farmers, fisherfolk and landless poor of Thatta, Sujawal and Badin districts will be affected and engaged directly under different interventions including value chains, infrastructure, financial services, extension and skill development services provision.
9. These smallholders will be reached via Villages Organizations. The village development roadmaps to be prepared for the development needs of the concerned villages, will identify various interest groups based on their material and natural endowments, development potential, orientation and preference. These groups will be identified and formed during project implementation, examples include: farmers through crops production interest groups; women and farmers through livestock interest groups; fisherfolks interest groups (leading possibly to aquaculture); traditional crafts production/marketing interest groups, etc.
10. Each interest group will range from 30 to 40 members and each Revenue Village will, on average, have around 10/12 interest groups. Women and youth representation and participation in VO management and subgroups will be ensured. Mixed interest groups of men and women will be established as much as possible when socio-cultural norms allow. In other cases, Women only interest groups will be promoted especially in dairy, small ruminants, processing and value addition and traditional crops. In addition, Youth groups (combining young women and men) will also be set up to ensure that youth can meet, discuss their situation, and challenge, and build up strategies to better link with established adult groups and stakeholders, as well as to develop their own capacities and vision. It could be very promising to mobilize young people for village assessments and analysis under the supervision/guidance of support organizations to provide methodologies and ensure a strong empowerment.
11. All these subgroups must consider the mainstreaming themes (Climate, Ecosystems, Nutrition, GEWE and Youth Inclusion) in their collective and/or individual business plan: how each group integrated each theme as a source of opportunity and strength?

Other Interested Parties

12. The current and usual socio-economic partners of smallholders are landowners, middle-men and inputs suppliers. The purpose of the project is to enable smallholders to become more independent from the latter (longer-term land agreement; better access to formal financial services, better access to good quality inputs). Thus, while landowners, middle-men and input suppliers are not the targeted beneficiaries of the project, obviously, they will be impacted by the project and may slow-down the results. This is the reason why it is recommended for SCRP to develop contacts with landlords, middle-men and input suppliers, explain the objectives of the project, and explore the

long-term interests they may have with enhanced smallholder livelihoods, and climate smart agriculture. Under any circumstances these stakeholders should directly benefit from the project, but they shouldn't adversely affect the impacts of the project.

13. The provincial government departments at the province and district level including Planning and Development, Agriculture Extension and Research, Fisheries, Coastal Development and Local Government will be involved in the Project implementation. Other non-government implementing partners like rural support organizations (RSOs) and NGOs will also be involved.
14. Both public services and NGOs should be trained as part of project implementation to better play their role in supporting smallholders and poor households. IFAD and ADB as financing agencies have an essential role to play. PMUs and implementing partners from other projects in Sindh will be, depending on the aim, approach and geographical implementation, involved to foster cooperation, capacity development and more integrated support.
15. At the provincial level, GoS will receive policy support in view to set up an enabling environment pro-poor households and smallholders.

Disadvantaged Groups

16. SCRP has identified disadvantaged groups including landless, women from BISP beneficiary families, and male and female youth from households with poverty score 0-42.

Analysis of Stakeholders

17. Majority of the target districts' population involved in agriculture is either smallholder or has no land and is dependent on landlords and middle-men. Similarly, most fishing communities work on others' boats as labourers and helpers with limited or no economic space for themselves. They are mostly indebted to the landlords, boat owners and middlemen which is almost an endless process continuing for decades. Because of this situation, they are highly vulnerable to climate change impacts and recurring natural disasters like floods, high tides, sea level rise and cyclones coupled with ecosystem degradation. Sea intrusion, degraded soils due to salinity, saline groundwater, shortage of water for irrigation due to excessive withdrawals upstream during peak periods further add to their perils. SCRP will help build their resilience to cope with these disasters and support them in developing and improving their economic wellbeing.
18. This diverse group represents SCRP stakeholders ranging from directly affected and benefited people to many indirectly benefiting communities. Those who are at the receiving end are those with a small source of income like smallholders and fisherfolk while there are others who have no regular source of livelihood except seasonal or occasional daily wages. Poor women and youth with meagre livelihoods and no or poor skills are making a good part of the target beneficiaries. The mobilization and development of these communities to effective and efficient village organizations (VO) will be a key to achieving the objective of the Project. A diligent needs assessment and implementation

of the proposed village development plans will depend upon proper mobilization and capacity building of the VOs.

19. The expected interest groups will have varied interests according to their choice of business like agri inputs supplies, dairy, fish, grading, marketing, processing and packing, etc. However, they will need to be supported in proper orientation and inclusive and participatory business plans development leading to improved agency and empowerment.
20. The more important group of implementing departments from the provincial government like Planning and Development (Project Management Unit) , Agriculture, Fisheries and Coastal Development Departments village organizations (VOs), RSOs and NGOs as Social Mobilization Partners (SMP) , make another group of stakeholders whose role will be crucial to the success of the Project. Capacity and previous experience of implementing partners in similar activities of climate sensitive interventions is crucial to the Project. In particular, PMU and DCUs will have to consider the assets and skills provided by recent or ongoing projects in Sindh and in the three targeted districts. For examples, the GCF funded project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management" (2020-2026) has supported, in the district of Badin (as well as Umer Kot and Sanghar districts in Sindh), agrometeorological service providers as well as extensionists with Climate Smart Agriculture skills. The supported farmers might also be very key to support and strengthen the other communities.

Summary of Project Stakeholder Needs

21. The following lines describe the expected needs of the stakeholders which may be refined when the project will start being implemented after meeting with them.
22. Foremost are the government departments including PMU and others to be well versed with the project objective and proposed interventions. The Agriculture and Fisheries Departments should have the knowledge and experience of climate smart agriculture, salinity management and fisheries management as affected by climate change. The introduction and adaptation of available best practices, techniques and locally suited technologies in agriculture and fisheries will be essential to achieve the goal of the project.
23. Agriculture Department is already working with FAO in climate smart agriculture (in Badin district) and should be able to ensure all the three districts have the required knowledge for such interventions, however, the Fisheries department needs, for additional skills and know-how, will have to be identified. As importantly, public services will be supported to adopt both, a system approach (so that technical advice can be provided given the constraints and potentials smallholders are facing from various perspectives), and a participatory approach (built on the practices, knowledge, objectives of smallholders). The services they will provide throughout the project should lead to the empowerment of local communities from a technical, a social and an economical point of view.

24. SCRP will be implemented through SMPs to be hired through a competitive process. One of the requirements for them would be their experience and capacity for delivering such services to the government officials as well as VOs and other interest groups. Consultants and other service providers, as required from time to time, will also have the required knowledge and experience as per needs of the project.
25. SCRP seeks to develop the resilience of poor and vulnerable smallholders. In addition to technical and economical skills, smallholders will have to be empowered through the project, encouraging self-confidence and agency. To do so, members of Village Organizations and Subgroups (see 3.2 above) will be provided with basic and sufficient economic, social, climate and environmental information related to Sindh context and trends and their links with food system and nutrition (see as an example the development for information on climate in paragraph 26. below).
26. For the same reasons, exchanges among villages, and a few visits of communities with success stories outside the three districts might be organized. Meetings among subgroups, between male, female and youth subgroups will be encouraged at village level to foster cooperation and inclusion. Bargaining capacities should also be skilled for subgroups to negotiate with their economic partners (suppliers of inputs and services, collectors, landowners). Skill provision in governance mechanisms will help to ensure smooth running of Village Organizations and interest subgroups. In addition, functional literacy might be also needed particularly for group leaders.
27. Strengthening technical and business capacities of various Villages Organisations and subgroups will be key, as part of Components 1 and 2. This involves taking existing skills into consideration, fostering peer exchanges, setting up training courses using the Farmer Field School approach and strengthening technical decision-making capacity. Depending on subgroups and their business and adaptation plan, focuses might be provided on Climate Smart Agriculture (salinity and water management practices, drought resistant varieties of crops, short duration crops, manure and compost, introduction of land levelling, practices like zero tillage, mulching, bed and furrow irrigation and sowing in lines using drills, agrometeorological information, post-harvest and food loss reduction methods), on fishery and aquaculture (marine meteorology, fisheries management, fish feed, aquaculture and reducing post-harvest losses), on livestock (animal feed, animal health), on food processing (food storage conditions, food transformation techniques, food transport), on kitchen garden production, on rural business development. Furthermore, depending on the villages' job needs assessment, technical skills will be provided by STEVTA (smartphone maintenance, solar panel installation and maintenance, vehicle and engine maintenance, for employable skills and self-employment business activities).
28. As much as possible and relevant, exchanges and links among groups, for technical solutions and partnerships will be encouraged (e.g., leading to increased manure recovery for crop production, or to mix rice production with shrimp product for example, or introducing fodder production in tidal zones).

29. In addition, those groups will be supported to strengthen their positioning and obtain more adapted services from suppliers (supply of inputs and services such as finance and agrometeorological information, extension services) as well as from markets and food collectors. Special focuses will be provided on land tenure for smallholders to understand land agreements. To do so, support organizations will be essential and must adopt a participatory approach enabling smallholders and villages groups to more empowerment.
30. Overall, the target communities need to be sensitized about climate change and its impacts. Generally, there is an understanding about the change in weather like change in rainfall pattern and intensity, occurrence of floods, droughts and cyclones but awareness about the possible climate trends, their expected long term impacts, the connections between climate vulnerability, healthy/degraded ecosystems and agricultural productions will be very key, in order, for farmers, social groups and households, to prevent and mitigated these climate impacts in adopting adaptation options and coping with disaster risks.
31. There will always be a need for financial support to the target communities and groups. SCRП has included the process and mechanisms for introducing financial facilities to farmers and fishermen to invest and adopt the technologies to overcome the climate related losses.

STAKEHOLDER ENGAGEMENT PROGRAM

Purpose and Timing of Stakeholder Engagement Program

32. The purpose of stakeholders' engagement is to take them on board about the whole process of project development and implementation, its objectives, proposed interventions, implementation methodology and process, its benefits and risks etc. As discussed above, the stakeholders have already been identified. IFAD and the relevant departments of the government of Sindh (Planning and Development, Agriculture [extension, research, water management], Fisheries, Coastal Development) are already on board since the concept stage. Frequent consultation meetings have been held with them in Karachi and Badin by the IFAD SCRП Design Mission in June 2023 and Design Mission in November 2023 for discussing the approach and methodology, target groups, interventions and implementation mechanism. The Concept Note was shared with Government of Sindh for its feedback while the Project Design Report will also be shared with them when ready.
33. With the start of implementation, IFAD will engage with the concerned PMU and other government departments' staff at the Secretariat and concerned Districts level in a start-up workshop to apprise them about their roles, build their capacity on the implementation strategy, selection and involvement of the target communities and groups including youth and women. To mark the occasion, a public session will be held with the strategic partners and representatives of the beneficiaries to present the project and gather comments and proposals concerning its implementation. Some key questions about implementation and the conditions for success will guide the discussion and ensure involvement of parties. For examples the selection criteria,

formation of village organization and umbrella development plan of VOs will be discussed.

34. At early implementation, umbrella plans will be designed with VOs, as part of a participatory approach. They will identify priority community and value chain infrastructure deficits that need to be addressed. Identification of interest groups around certain value chains, development of business plans, capacity building needs and required technical assistance will be explained.
35. Social Mobilization Partners to be hired as implementing partners will be deeply involved in the project at all levels. They will have a key role in implementing the project to the satisfaction of client and beneficiaries for minimizing the chances of complaints. Some RSPs are involved in IFAD's NPGP project and other projects in the target and neighbouring districts working with the communities. They have been very helpful in facilitating IFAD's Concept and Design Mission field visits to the concerned communities in all the three districts of Thatta, Sujawal and Badin. FAO is implementing a GCF project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management - TIBCRAWM" in Badin and IFAD Design had quite elaborate discussion and consultation with it during the Design Mission in November 2023.
36. After selection, PMU will hold detailed sessions with the implementing partners on the objectives, approach and methodology, target groups selection, development of umbrella village plans and infrastructure needs. Their expected role in project implementation under different components and activities will also be thoroughly discussed. Details about identification and selection of value chains, assisting the farmers and fisherfolk to achieve true production potential of their existing economic activity and get fair market return through access to improved inputs (including nutrient-rich varieties and self-produced inputs such as compost or biopesticides), production technology, climate change adaptation, affordable credit services, training, extension services, aggregation/grading and competitive markets will be explained. Engagement with the target groups, setting targets and development of work plans and implementation mechanisms will be discussed.
37. Some of the target communities have been visited with the purpose of assessing their current livelihoods situation and needs and discussing the expected SCRIP project. They included agriculture and fishing communities, existing cooperatives and businessmen.
38. However, further consultation is required concerning climate change adaptation and the measures for mitigating its impact in the agriculture and fisheries sector to be prioritized and implemented. Applying the targeted adaptation assessment methodology, the government departments, RSOs, and VOs will be consulted about possible adaptation measures also contributing to reducing exposure and sensitivity to climate hazards. A set of techniques and approaches derived from Climate Smart Agriculture, Agroecology, Marine Ecology and Aquaculture, and food processing will be assessed and prioritized for their implementation through the project toward smallholders.

39. The Project will deploy a comprehensive communication campaign at the start involving radio and televisual media, as well as electronic and print media to inform the potential beneficiaries about project approach, interventions, eligibility and roles and responsibilities. This will be further backed by PMU, Agriculture, Livestock and Fisheries Extension staff to inform the target cohort. This will be followed by IPs and Extension staff visits to target villages to organize the willing villages into partner VOs, as per the well-established process in prevailing social mobilization approach. Overall PMU district offices, agriculture extension, livestock and fisheries departments together with the implementing partners will be responsible for engagement and consultation with the VOs, interest groups about SCRP interventions and their role in selection and implementation of schemes and activities.

40. Introductory and consultative meetings have already been held with the following stakeholders during the Design Mission to discuss the above and the selected adaptation measures.

- i. Planning and development department
- ii. Agriculture department
- iii. Ag. Extension
- iv. Ag. Research
- v. Water Management
- vi. Livestock department
- vii. Fisheries department
- viii. Coastal Development department
- ix. Forest Department
- x. FAO
- xi. National Rural Support Program
- xii. Sindh Rural Support Organization
- xiii. WWF

41. Support to VOs will start with a board consultation of households, farmers/fisherfolk, youth and women to grasp threats and opportunities, identify leaders and local practices, and build on that, appropriate support to interest subgroups.

Strategy for Information Disclosure

42. As discussed above, information was shared with the concerned stakeholders during the meeting for their information and feedback to IFAD. After SCRP approval by IFAD and Sindh government, the information including PDR, SECAP and GRM will be available to all from the PMU office, Project website and IFAD website. Similarly, anyone can request for required information from the Project office. SCRP will be presented to each target village at the start of the support phase.

Review of Comments

43. The observations and comments offered during the design was recorded and thoroughly reviewed by IFAD team and be addressed in the report as long as

possible. Otherwise, sufficient justification will be provided for no or partial consideration.

RESOURCES AND RESPONSIBILITIES FOR IMPLEMENTING STAKEHOLDER ENGAGEMENT ACTIVITIES

Resources

44. SCRP will provide the required human and financial resources through PMU. Training needs assessment, planning, identification and hiring of experts or firms will be the responsibility of PMU. Some of the training courses under agroecology, CSA, salinity management, marine ecology, value chains identification and business plans preparation may be outsourced by PMU or through SMPs. Lessons learned and knowledge gained from FAO/GCF project "TIBCRAWM" will also be handy assets to be used by SCRP. The selection of RSOs and other partners will be based on prior experience in social mobilization, climate resilient infrastructure, CSA and fisheries management.

1.2. Management Functions and Responsibilities

45. As discussed before, PMU is the overall entity for the management and implementation of all activities. It will also have district level units in each of the three selected districts to manage the related activities. However, SMPs will be assisting and facilitating the implementation of adaptation measures directly or indirectly through expert consultants.

GRIEVANCE REDRESS MECHANISM

Objectives of the Project GRMs

46. The objective of the project GRM is to provide project stakeholders with accessible and inclusive means to raise issues, concerns and grievances and allow the project leadership structures to respond and act upon them in a timely, effective and transparent manner that promotes a good direct and indirect stakeholder relationship and a harmonious atmosphere.

47. The GRM will be a system by which queries or clarifications about the programme will be responded to, problems with implementation will be resolved, and complaints and grievances will be addressed efficiently and effectively. The purpose of the grievance redress mechanism is:

- To be responsive to the needs of beneficiaries and to address and resolve their grievances;
- To serve as a conduit for soliciting inquiries, inviting suggestions, and increasing community participation;
- To collect information that can be used to improve operational performance;
- To enhance the programme's legitimacy among stakeholders;
- To promote transparency and accountability;
- To deter fraud and corruption and mitigate programme risks.

Principles of the Project GRMs

The GRM is based on the following six guiding principles:

1. Responsiveness and Confidentiality

48. The GRM will entertain all types of complaints, comments and suggestions, with a view to protect beneficiaries from any risks related to the project implementation and improve the project's efficacy and efficiency. Comments and suggestions received will be given due consideration and the providers will be kept informed of the response to their inputs. In order to ensure transparency in handling and processing of grievances, all project stakeholders, especially complainants will be kept informed of the handling process and the outcome of the redress process in timely manner. As confidentiality is an integral part of fairness, the identity and personal details of complainants will only be disclosed to those involved in the resolution of the grievance.

2. Objectivity and Independence

49. The mechanism empowers the Grievance Redress Cell to operate independently and objectively while handling grievances and to ensure that 1. all information, stakeholders and records required for inquiry and analysis are easily accessible. To avoid any conflicts of interest the selection of Complaint Handling Officers will be made from the project / consultant staff / community members, identified at different tiers of the project structure and community groups.

3. Simplicity

50. Simple procedures will be adopted for logging complaint and/or submitting suggestions or comments (described below), to ensure the GRM is accessible and understandable to all project stakeholders especially marginal groups, poor farmers and female beneficiaries.

4. Fairness

51. The GRM will equally consider all complaints irrespective of their nature, size and complexity. All complaints, comments and suggestions received will be registered and the person or entity making the request for Redress will be acknowledged in writing. The project staff implementing the GRM will be specially trained for grievance handling and resolution.

5. Timeliness

52. All grievances, irrespective of their nature and size shall be considered and corrective actions taken within 25 working days. All possible efforts will be made to complete the process within the shortest possible time.

6. Participation

53. The GRM encourages any stakeholders to lodge complaints, make suggestions, including for improvement of the GRM. The GRM will ensure that project beneficiaries are included in the process of redressing grievances and incorporating suggestions where required. Matters concerning Environmental and Social Management and Involuntary Resettlement will be an integral part of the process.

7. Eligibility and Validity of a Complaint

54. A complaint is considered valid and will be processed by the GRM whenever:

- It relates to an on-going SCRP financed activity;
- It is filed by project affected individuals and/or communities, or their representative, who believe that they are or may be directly and adversely affected by the project.
- The complainant is not a direct affected beneficiary of the project, but the subject of the complaint affects him/her or their community;
- Complaints with inadequate details will not be rejected for lack of information; the project will seek additional information from the Complainant/s and then take a decision on eligibility.

8. Exclusions

55. The following types of complaints shall not be taken up for consideration:

- Anonymous complaints;
- Frivolous issues that are not related to the Project;
- Cases involving decisions/policy matters in which the complainant has not been affected directly/indirectly;
- Cases where quasi-judicial procedures are prescribed for deciding matters or cases that are sub judice;
- A grievance which has already been disposed of by the GRM unless new evidence is submitted; and
- Complaints about corruption which should be lodged and dealt with separately from this system.

Grievance Redress Process

The process will involve the following procedure and mechanism.

Grievance Registration Procedure

56. A GRM should be located as close to the people as possible to be accessible to the affected persons (APs) including vulnerable groups. Project stakeholders and APs will be able to use a variety of channels to access GRM. It is important to identify and make provisions for different means of entry into the grievance redress process, as it helps to increase the access of APs to the GRM. Multiple channels can be used for presenting complaints. A grievance or a complaint can be registered in four ways; (1) Direct hard copy to the concerned office, (2) project website, (3) sending SMS or WhatsApp messages and (4) email. All the four facilities will be available after project offices are established, staff recruited and designated and communication channels are established. SMPs offices in the concerned districts will also receive complaints directly from the communities or through above mentioned ways. The Project will develop a standardized Form for complaints/comments to be available in the offices and on website. The required addresses, cell numbers and emails will be publicised in the project area and displayed in the concerned offices. The GRM procedure,

focal persons for receiving and responding to the grievance, timelines for redressal and guarantee of confidentiality will also be shared.

57. The receipt of complaints is key and hence a simple and understandable procedure is adopted for receiving grievances, suggestions and comments relating to the project. The complainant may submit, containing his/her personal information, suggestions and/or comments on a simple paper, to the (i) PMU office in Karachi, (ii) DCU/SMP office in Thatta, (ii) DCU/SMP office in Sujawal, (iii) DCU/SMP office in Badin. Usually, the concerned office should have a Focal Person for receiving and registering a complaint/suggestion/comment or the Aggrieved Person/Complainant can drop his/her written complaint, suggestion/comments in a Box placed at a visible location for the purpose in the office. Complainants will be encouraged to use the standard format that will be available at every office/outlet mentioned above.
58. The Project will ensure that any person either in his personal capacity or representing a group of complainants and/or entities that files a grievance will be made aware of the grievance mechanism. The Project will facilitate tracking, evaluation and response to grievances.
59. A project GRM awareness campaign will be launched in print and electronic media. This will include distribution of brochures (in local languages), signboards in the vicinities where project interventions will be executed and in print media. The contents of these hoardings may include but not limited to the following:
60. All grievances, suggestions/comments etc. will be recorded in a Grievance Register by the Focal Person(s) / Complaint Handling Officer within two (2) working days of the receiving of the grievances. A unique number will be assigned to each grievance, suggestions and comment. In addition to lodging a grievance/suggestion/comment in the Grievance Register, the same shall also be uploaded in a dedicated database to be maintained at Project Web Portal, which can only be accessed by Project Director or any of his assigned representatives.
61. The Focal Person will formally acknowledge the receipt of grievance within five working days of the submission of grievance and will inform the complainant that the Project will respond within 20 working days. It will be ensured that all such acknowledgements, verbal or written are recorded in an appropriate manner to ensure a record of correspondence. Acknowledgments should include a summary of the grievance and an estimated time for response/resolution.

Grievance Redress Mechanism

62. The mechanism involves a hierarchical order starting from the field or district level Grievance Redress Sub-committee (GR Sub-committee) to the PMU level Grievance Redress Committee (GRC) to the Steering Committee (PSC) as shown in Figure 2. Usually, complaints and grievances should be resolved to the satisfaction of the complainant/aggrieved person at the concerned DCU

Sub-committee level otherwise, it will be referred to the GRC which should decide and resolve the issue. The complainant can appeal to the Steering Committee through GRC if he/she is not satisfied with the decision of GRC.

Roles and Responsibilities of Grievance Redress Committees

Project Steering Committee

63. The Project Steering Committee (PSC) will act as the Apex Forum to hear and adjudicate on appeals against GRM decisions. Pending cases shall be presented by the Chairperson of GRC to the Project's Steering Committee. The PSC will review and resolve any appeals against the Grievance Redress Committee. Appeals must be lodged with the GRC for submission and reporting to the PSC.

Grievance Redress Committee

64. The Grievance Redress Committee (GRC), constituted at PMU Level and chaired by Project Director, will have the following mandate:

- i. Resolving and addressing complaints not resolved at GR Sub-Committee
- ii. Reviewing appeals lodged against the resolutions of GR Sub-Committees
- iii. Considering and determining corrective measures in the light of comments and suggestions received by GRC and/or recommended by GR Sub-Committees
- iv. Monitoring GRM handling by GR Sub-Committees and reviewing resolutions suggested to them.
- v. Notifying members of GR Sub-Committees
- vi. Analyzing data on grievances and using this to make informed decisions
- vii. Reporting to PSC unresolved grievances at GSC level

65. The GRC will be the highest forum within the project for redressing the grievances received from the beneficiaries, stakeholders and other concerned. The committee, while handling a complaint may requisition any staff for its assistance and/or may constitute a special committee if required.

Grievance Redress Sub-Committees (DCU level)

66. The GR Sub-committees will be established at the three DCUs (Thatta, Sujawal and Badin). These Sub-Committees will be responsible for redressing complaints, grievances and suggestions in their respective areas and will forward unresolved complaints and unattended suggestions / comments to the GRC. A Focal Person in each DCU office will be responsible for collecting, registering and handling complaints, suggestions and comments that are submitted.

Verification of Complaint/Investigation/Redress

67. Once a complaint and/or suggestion / comment has been forwarded to the GRC or Sub-Committees, the Chairperson of the Committee will nominate a committee member to verify the issue and/or analyze the suggestion / comment prior to a thorough investigation, and to prepare a working paper for consideration of the Committee / Sub-Committee in its meeting. The investigations will include collecting and reviewing relevant documents, making site visits, consulting appropriate internal staff, contacting external stakeholders, interviewing the complainant as appropriate.
68. The Committee and Sub-Committee will meet as often as required to handle complaints and suggestions. The GRC and its Sub-Committee will ensure attendance of complainants at meetings as observers to ensure transparency. The GR Sub-Committees, in case of complaints pertaining to social and tribal issues / conflict, may redirect complaints for redress through the local elders if required, or they may invite such elders to their meetings for facilitation and assistance.

Right of Appeal

69. If a complainant is dissatisfied with and/or unwilling to accept the resolution of the GRC or its Sub-Committees, he/she may approach the appellate forum for review. The appeal committees will review the case and determine if further action is possible. Once all options for corrective actions have been explored and no further action is deemed appropriate, a written notice will be sent to the complainant advising that his/her grievance case is closed. In cases where appellate forum is PSC the complainant will be asked in writing to submit a written appeal along with the reasons for not accepting the resolution of GRC, for submission to PSC for issuing a final decision into the matter.

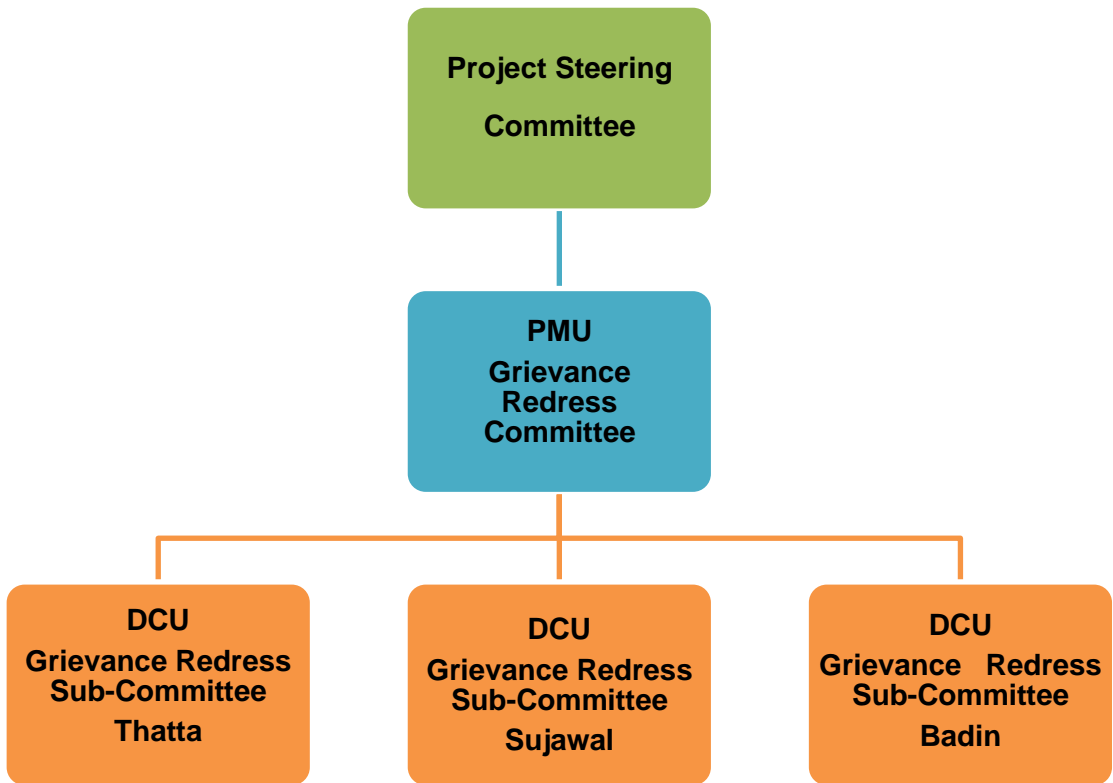


Figure 1. GRM redress mechanism.

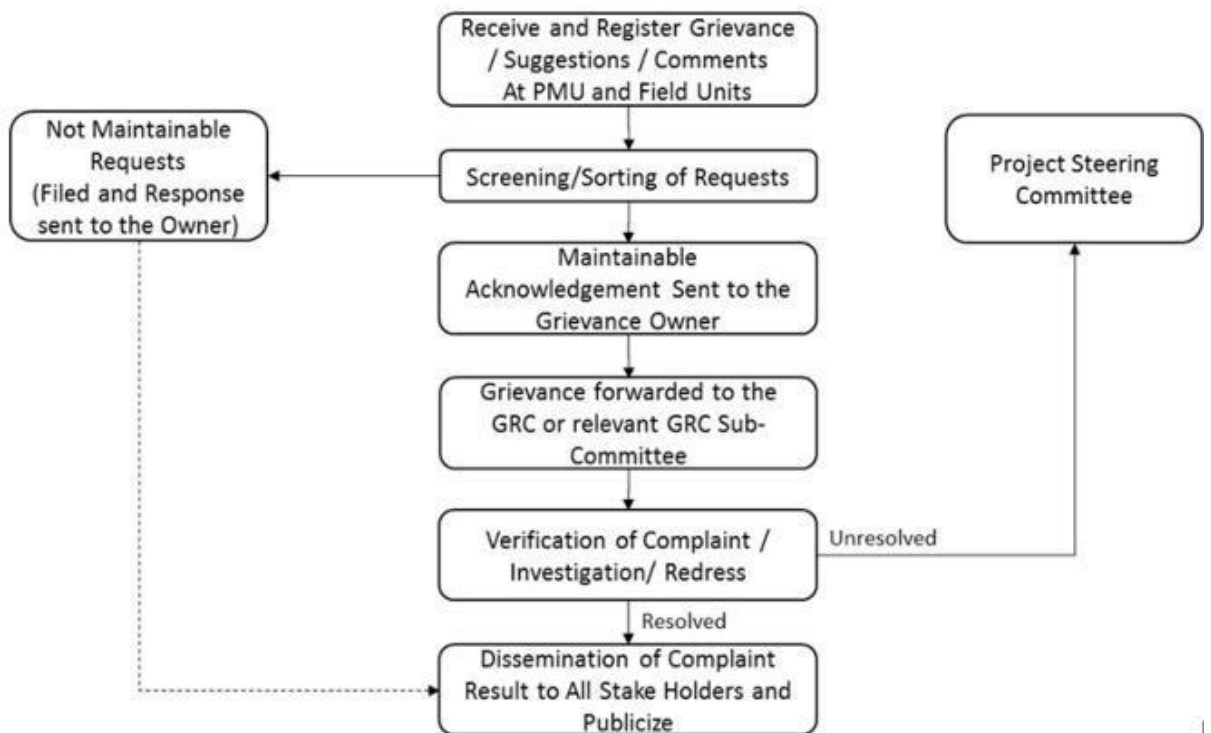


Figure 2. GRM process from complaint registration to final resolution of complaint.

MONITORING AND REPORTING

Involvement of Stakeholders in Monitoring Activities

70. As discussed above, the stakeholders will be involved throughout the process from verification of the complaint/grievance to the resolution and conclusion of it. In case they are not satisfied, the right of appeal has been provided at GR Sub-Committee and GR levels. Also, community elders may be involved during the proceedings for transparency purposes.

Reporting Back to Stakeholders and Feedback

71. Once the redress process is completed and the GRC and/or GR Sub-Committee has reached a conclusion, the result will be communicated to the complainant and concerned stakeholders. The results of the redress process will be uploaded to the project website. Besides communicating the results to the Complainant, the Focal Person(s) / Complaint Handling Officer will also record the information pertaining to the decisions of the Committee(s) in the grievance register and corresponding grievance database. The actions suggested by the GRC or Sub-Committee will be communicated to the concerned person(s) and will be recorded in a register.

72. The complainants will be informed of the proposed resolution in writing, and if need be, the same can be explained over telephone or in person to his/her satisfaction. If the complainant is not satisfied with the resolution, he or she will be informed of further options, which would include pursuing remedies through avenues afforded by the Pakistan's legal system.

73. The written response will clearly outline the course of action the project has undertaken to redress the grievances and the specific terminal date by which the recommended remedies shall be completed. Potential actions will include responding to a query or comment, providing users with a status update, referring the grievance to another level of the system for further action. The project will take action on every grievance. The Affected Person shall provide a written response agreeing or disagreeing with the proposed course of action within two weeks period after receiving the recommended actions.

Regular Review of GRM Process

74. GRC will conduct quarterly and annual review of the GRM process to ensure that all registered complaints and grievances have been resolved and actions taken. It will also check for compliance with the process, any gaps and improve the process. The following Table shows the objectives and monitoring indicators of the quarterly and annual reviews.

Period	Objectives	Indicators
Quarterly review of quantitative indicators	<p>To assess if grievances are correctly screened and classified</p> <p>To assess if suggestions / comments are property identified and classified</p> <p>Identify trends in Grievances</p> <ul style="list-style-type: none"> · To ensure grievances are being addressed 	<p>§ Number and type of grievances received</p> <p>§ Number of grievances redressed by GRC and the three Sub-Committees.</p> <p>§ Repeat of grievances from same stakeholders</p> <p>§ Repeat of grievances from several stakeholders</p> <p>§ Timeframe for closure of grievances</p> <p>§ Number of comments accepted and corresponding actions taken</p> <p>§ Number of suggestions received and accepted</p>
Annual review of grievance redress process	<p>To assess the compliance with the GRM</p> <p>To evaluate progress with achieving results</p> <ul style="list-style-type: none"> · To identify improvements and update grievance handling and redressing procedures 	<p>§ Compliance with the GR process</p> <p>§ Completeness of grievance log and register</p> <p>§ Number of grievances received by type</p> <p>§ Number of grievances resolved</p> <p>§ Number of appeals received</p> <p>§ Number of appeals resolved</p> <p>§ Qualitative assessment of stakeholder awareness of grievances mechanism.</p> <p>§ Number of suggestions/ comments accepted</p>

BUDGET

Budget

A sufficient budget should be dedicated to the GRM as part of the Project implementation cost.

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex: SECAP - Annex TAA_Targeted Adaptation Assessment

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department

Sindh Coastal Resilience Project

**Social, Environmental and Climate
Assessment Procedures (SECAP)**

Targeted Adaptation Assessment (TAA)

March 2024

1. Sindh Coastal Resilience Project

1.1 Overview and Background of the project

1. The Sindh Coastal Resilience Project (SCRIP) is a co-financed project by ADB and IFAD (parallel-financing modality) which will be implemented in three poorest districts of Sindh province, namely Sujawal, Thatta and Badin for an overall budget of USD 263 m for a 7-year period. The overall project has four important components: (1) Integrated Flood Risk Management, (2) rebuilding ecosystems for natural defences, (3) Livelihoods, and (4) Capacity building. IFAD is financing the third component (see below).
2. SCRIP was screened as “Substantial Risk” in the climate screening procedure and therefore, this Targeted Adaptation Assessment (TAA) report was prepared. Given the socio-economic and climatic context of the targeted area, its aim is to identify and prioritize the adaptation measures to be implemented during the course of the project to achieve sustainable long-term results and impacts in terms of strengthened farmers’ resilience.
3. The TAA would nurture the PDR and provide guidance to Project Management Unit (PMU), implementing partners (IPs), communities and other departments like Agriculture Extension and Fisheries for the implementation of the concerned components and sub-components of the project to address concerns related to climate adaptation. It will elaborate the PDR and AWPBs, in particular with the PMU’s expert involved in climate adaptation. The Environmental Specialist and concerned staff of IPs will ensure field implementation and monitoring of the selected adaptations options including daily administrative, climate checks and records with periodic audits from PMU.
4. Within three districts of the project (figure 1), the Taluka (sub-district) and Union councils will be identified on the basis of poverty ranking, agribusiness development potential, available resource envelope and consideration of other ongoing projects and programmes.
5. The project will be executed by the Planning and Development Board of the Sindh government through a Project Management Unit at Karachi, and reporting to Project Steering Committee (PSC). PMU will include a climate adaptation specialist able to develop TORs and contribute to tender with a climate focus, as well as to assess skills of service providers and the quality of the support they provide to smallholders and stakeholders.

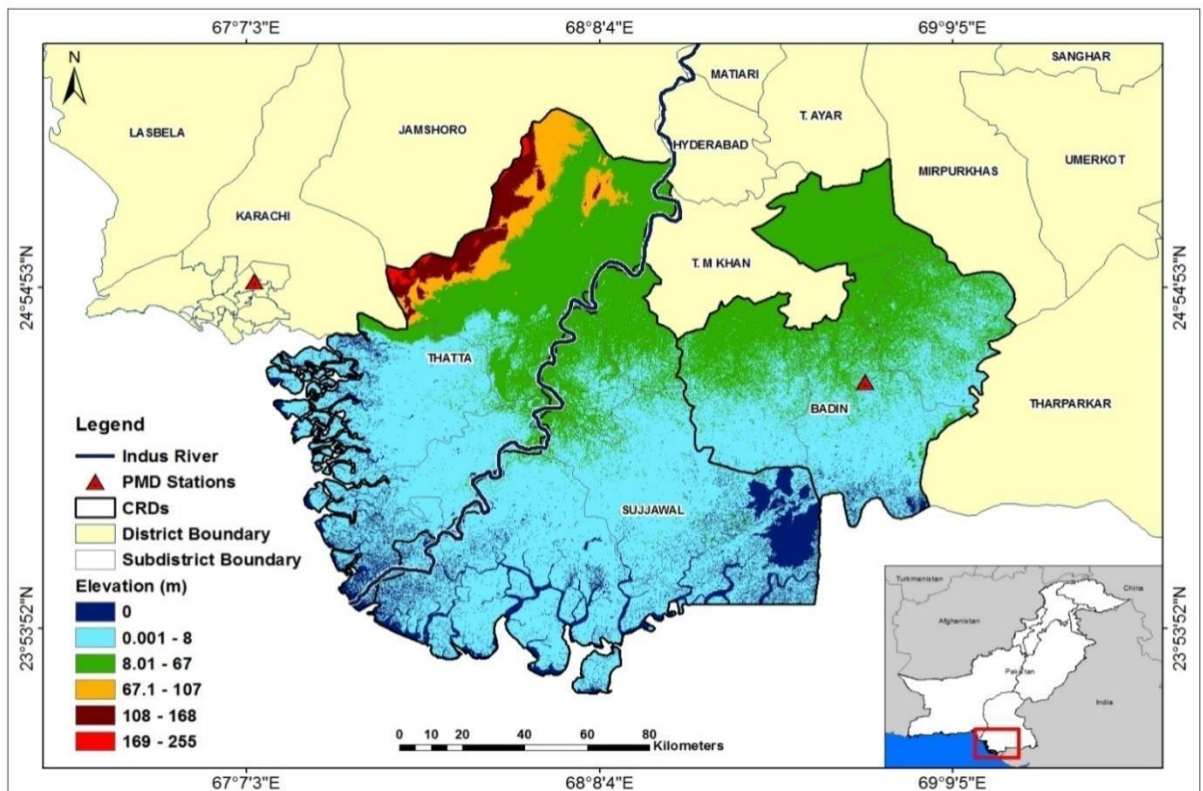


Figure 1. Location of Project area--Districts Thatta, Sujawal and Badin.

1.2 Project summary

6. IFAD is financing Livelihoods project in the three selected poor districts affected by ecosystem degradation and then particularly vulnerable to climate change. Fishing and agriculture are the common sources of livelihood, but the large majority of population is landless or own small landholdings and majority of fishermen work as hired hands on boats owned by others. The project is aimed at developing sustainable climate resilient food value chains and livelihoods for target agriculture and fisheries dependent poor communities in the selected three districts.

Targeting

7. SCRPs target the three poorest coastal districts with selected Taluka (sub-district) and Union council. Fishing communities in the coastal line and smallholders including women, youth, landless poor, daily wage earners and fishermen working as hired hands on others' boats will benefit from project interventions. Direct Target beneficiary households are estimated to be 150,000.

Project Components. The project is composed of two main components plus a project coordination and policy support component.

- a. **Component 1:** Transformation of Coastal Rural Incomes where rural communities will be organized and assisted to develop capacities for market oriented improved productivity and production and value addition. The component has four subcomponents: (1.1) Targeting and organization (1.2) Community and value chain

support infrastructure, (1.3) Access to affordable finance, and (1.4) Institutional support.

- b. **Component 2:** Economic and Social Inclusion of Disadvantaged Groups having subcomponents (2.1) Economic graduation of landless poor, (2.2) Job market access.
- c. **Component 3:** Project Management and Policy Support

Each of the three components is concerned by climate adaptation and include specific adaptation options.

- 8. The ADB parallel financing includes river protection bunds, improved drainage, restoration of natural waterways, improved irrigation control and management infrastructure, bridges and link roads, mangrove plantation through community management and capacity building of communities and concerned departments.

Wherever possible, the programs of activities of the two projects will be coordinated as both are related to climate resilience for the same communities. The two sets of adaptation options need to complement each other to achieve lasting and effective impacts. The grey and structural interventions by ADB will control floods through rehabilitation of surface drainage system in the project area resulting in protection of assets, properties, livestock and agricultural lands and crops while green and nature-based solutions will help restore the ecosystem and control degradation of the system. IFAD will adopt options to increase resilience of the communities against climate change by introducing and implementing climate smart agriculture, aquaculture, asset development and capacity and skill development of the target groups for improved and sustainable livelihoods.

1.3 Date of preparation of the vulnerability and adaptation assessment

- 9. The Concept Mission of SCRP was conducted in June 2023 when the SECAP Review Note was also prepared and subsequent reviews and comments were carried on until the Design Mission in November-December 2023. This TAA has been carried out simultaneously with the preparation of the Project Design Report in December 2023 and January 2024.

2. Indication of Hazard, exposure, sensitivity and adaptive capacity

2.1 Sindh Climate Baseline

10. The province of Sindh is situated in a subtropical region and is usually warmer throughout the year except December and January. The average annual temperature in Sindh is 27 degrees Celsius. It is highest in June at 34°C and lowest 17°C in January¹. Extreme temperatures go in summers (May to August) above 46°C and the minimum average temperature of 2°C (36°F) during winters (December and January) registered in the mountain of Sindh (up to 2.260 meter high). For precipitation, Sindh receives an average of 180 mm rainfall during a year². With 10 hours per day, March is the sunniest month while in July, the sun shines the least due to clouds. Average humidity is 45 percent. It is quite dry in April and quite humid in August with 69 percent humidity³.
11. An analysis of the changes in minimum and maximum temperature and rainfall in Sindh coastal area has shown that yearly mean maximum temperature fluctuated between 32.3 to 35.1°C, while that of minimum mean temperature ranged between 18.8 to 20.8°C which revealed that mean minimum temperature was towards the higher side. The average rainfall has also reduced and the overall impact on surface water bodies and vegetation has been adverse from 1972 to 2010. Vegetation species diversity has been reduced considerably and currently the vegetation is dominated by salt tolerant shrubs like the family of Chenopodiaceae and Tamericeae⁴.
12. According to the Intergovernmental Panel on Climate Change (IPCC), there has been 0.6 to 1.0°C rise in average temperatures since early 1900s in the coastal areas of Pakistan. 10 to 15% decrease in precipitation in the coastal belt and hyper arid plains over the last 40 years has been observed. It has been predicted that the Western Himalayan glaciers may retreat during the next 50 years, resulting in decrease in downstream river flows by 30% to 40% over the subsequent fifty years⁵.

2.2 Current and expected climate trends

13. The vulnerability of Sindh to floods doesn't depend on the precipitation in the province but relies on the upstream flow of water through the Indus River. Any changes in temperatures, rainfall, snow and glacial melt in the upper Indus basin is directly affecting Sindh. Low snowfall in the mountains feeding the Indus River system means less water for Sindh and high temperature causing melting of snow and glaciers or heavy rain in the North part of Pakistan mean more water for Sindh and higher risks for floods. The heavy downpour of KP inundating the Indus Delta in 2010 is a good example.
14. Heavy rainfall of 2011 in Sindh resulted in heavy flooding and prolonged inundation in many districts. The study by Heureux et. al. (2022) indicates a general increasing trend for

¹ [Climate: Sindh in Pakistan \(worlddata.info\)](https://www.worlddata.info/asia/pakistan/climate-sindh.php).

² Costs of Inaction on Climate Change for Sindh. Policy Paper, Government of Sindh. 2018.

<https://sindhsgdgs.gov.pk/wp-content/uploads/2020/10/Costs-of-Inaction-on-Climate-Change-for-Sindh.pdf>

³ <https://www.worlddata.info/asia/pakistan/climate-sindh.php>

⁴ A. Alamgir, et al. Appraisal of Climate Change Impacts on the Coastal Areas of Sindh Using Remote Sensing Techniques. American-Eurasian J. Agric. & Environ. Sci., 15 (6): 1102-1112, 2015

⁵ <http://www.mangrovesforthefuture.org/assets/Repository/Documents/A-Handbook-on-Pakistan-Coastal-and-Marine-Resources.pdf>

precipitation (with values above 10 mm/year in some locations), supporting trends identified by Q.U.Z. et, al. (2009) earlier for the Punjab province. However, the latter study finds a decreasing trend in precipitation over the Sindh province for the period 1910–2007, while the work after 2007 shows an increasing trend, although with a smaller magnitude and without statistical significance.

15. The annual precipitation of Sindh also has non-significant increase i.e. 15 mm for the data period from 1914 to 2007. The summer monsoon has almost no change and winter precipitation also have non-significant increase of 7.5mm over the period mentioned. The World Bank and ADB (2021) has again warned of changes to Pakistan’s rainfall and runoff regimes, and hence its water resources, were highly uncertain, but an increase in the incidence of drought conditions was likely. Mean rainfall in the arid plains of Pakistan and the coastal belt has decreased by 10%–15% since 1960, contributing to the ongoing degradation of the country’s wetlands and mangrove ecosystems. Most other regions have experienced a slight increase, both in the monsoon and dry seasons. The number of heavy rainfall events has increased since 1960, and the nine heaviest rains recorded in 24 hours were recorded in 2010⁶.
16. A recent study⁷ has analyzed 57 years (1961-2017) time series climate data of Thatta, Sujawal and Badin districts and has shown rising trends in temperature. This study has concluded that the margin between the mean annual maximum and minimum temperature continues to get narrower. The 48 years (1961 to 2008) data analysis has also shown that precipitation seemed to be declining across these districts. Relative humidity and wind speed have decreased in Thatta and Sujawal while both are increased in Badin during 48 years.
17. Selected communities in the irrigated farming and fishing communities of Thatta expressed their concerns in a recent study⁸ by saying that summers had become hotter and longer while rainfall pattern had become less predictable and more intense, with longer dry spells in between. Rains were destructive for crops, trees, and soil. Lightning storms were more frequent, threatening the lives of people and their livestock. Both farmers and fishermen complained that unpredictable weather mad it difficult to make livelihood-related decisions, such as when to sow certain crops and when to sail out for deep sea fishing.

2.3 Hazard

18. Recent history of district Badin shows that it has remained in the grip of disasters in one form or another. Cyclone, heavy rains, droughts and floods have followed each other with short intervals⁹. The frequency of floods from upstream, local heavy rains and droughts is higher than other hazards. Villages and union councils along the coast are having a history of being hit by cyclones. Being a dry region, Thatta always faces the risk of droughts. The Kohistan and desert zone of the district are especially vulnerable to this hazard as they face extreme shortage of potable water.

6

⁷ S.U. Fatima et al (2021), INT. J. BIOL. BIOTECH., 18 (3): 485-497, 2021. Variation in Climatological Regimes in Coastal Rural Districts of Sindh, Pakistan.

⁸ Khan, K., Khan, M., Parveen. T, and Hussain, S. (2021). Impacts of Climate Change in Vulnerable Communities in Sindh, Pakistan: Voices from the Community. Working Paper. Population Council, Islamabad: Pakistan.

9

19. District Badin has been quite vulnerable to different climate related disasters (Table 1¹⁰ below). It has seen two heavy rainfalls, three cyclones and seven flood events from 1964-65 to 2011, without taking 2022 into consideration.

Table 1. History of disasters in Badin

No.	Disaster	Year	Severity	Worst Affected Areas
1	Cyclone	1964–65	High	Union Council Ahmed Rajo, Union Council Bhugra Memon, Union Council Seerani, Union Council Mithi III, Union Council Khoski
2	Heavy Rainfall	1973	Medium	Taluka Badin, Taluka Shaheed Fazil Rahoo
3	Flood	1976	High	Ahmed Rajo, Bhugra Memon, Khorwah, Tarai, Garho, Seerani
4	Flood	1988	Medium	Ahmed Rajo, Bhugra Memon
5	Flood	1994	High	Entire District
6	Cyclone	1999	High	Entire District particularly near the coastal belt
7	Earthquake	2001	Medium	Taluka Badin, Taluka Shaheed Fazil Rahoo
8	Flood	2003	High	Taluka Badin, Taluka Shaheed Fazil Rahoo
9	Cyclone	2007	Medium	Union Council Ahmed Rajo, Union Council Bhugra Memon, Union Council Khorwah, Union Council Tarai, Union Council Garho,
10	Heavy Rainfall	2007	Medium	Taluka Badin, Taluka Shaheed Fazil Rahoo
11	Flood	2010	High	Taluka Badin, Taluka Shaheed Fazil Rahoo
12	Flood	2011	High	Taluka Badin, Taluka Shaheed Fazil Rahoo

20. Coastal areas of Sindh are highly vulnerable to tropical cyclones and associated storm surges. Tropical cyclones have struck coastal areas in 1999, 2000 and 2010 causing damage to the lives and properties of coastal communities. The changing climate is resulting in increased frequency, intensity and changes in tracks of storms¹¹.
21. Cyclones have also negatively impacted the coastal districts. Cyclones will destroy human villages and result in the immense loss of human and animal life, as well as the devastation and disruption of fishing vessels, which will have a significant effect on the livelihoods of the majority of residents. Tropical cyclones have historically emerged over the Arabian Sea and settled on the coastal areas of Sindh. On many occasions, the districts of Thatta and Badin have been seriously affected¹².
22. Floods in 2022 in the three districts...The floods brought heavy devastation including losses of human lives, livestock, agriculture and infrastructure. Overall, 57 people had died in these districts where 41 were in Badin, 11 in Thatta and 5 in Sujawal. Among the population affected, Thatta was the hard hit with 23.5 % of its population, Sujawal 19.5 % followed by Badin with 16%. The floods struck before the harvesting of major crops like sugarcane, rice and cotton. Badin lost about 17 % of its crops, Sujawal suffered about 13.9 % losses while 8.03 % of Thatta crops were lost¹³. Sindh grows high value vegetable crops of onion, tomato and chilies suffering economic loss of about USD 374 million in the affected districts with highest

¹⁰ Climate Change Risks and Vulnerabilities in Badin District, Sindh, Pakistan, ADPC, 2014.

¹¹ <http://www.mangrovesforthefuture.org/assets/Repository/Documents/A-Handbook-on-Pakistan-Coastal-and-Marine-Resources.pdf>

¹² <https://docc.sindh.gov.pk/files/DoCC/Documents/NAP%20Final%20Draft-edited.pdf>

¹³ Floods 2022 Sindh. Provincial Disaster Management Authority, Sindh.

losses in Thatta, Badin and Mirpurkhas¹⁴. In addition, heavy casualties of livestock and serious damages to infrastructure were also reported.

23. The increased risks to the coastal areas and the Indus deltaic region due to sea level rise, coastal erosion, and increasing cyclonic activity in the Arabian Sea¹⁵ have compounding effects. The Indus Delta is located in the heat zone and is impacted by any rise in temperature, floods, droughts and cyclones. In this region, temperature is likely to increase by 4°C till 2100 and rainfall is going to be highly variable on temporal and spatial scale. The deltaic region would not only be affected by the local weather conditions but also weather activities upstream Indus and over the neighboring sea in the south due to climate change.

2.4 Exposure

24. The three districts are densely populated, with limited infrastructure and poor-quality housing (see SECAP Review Note, table 1). Except in the coastal zone, dedicated to mangrove and tidal areas, the project zone is also largely devoted to agriculture. This context explains the high level of exposure.
25. An increase in the number of people affected by flooding is projected, with a likely increase of around 5 million people exposed to extreme river floods by 2035–2044, and a potential increase of around 1 million annually exposed to coastal flooding by 2070–2100¹⁶.
26. A severe tropical cyclone (2-A) affected the Indus River Delta on 20th May, 1999 (winds gusting up to 270 km per hour, impacted the coastal towns and villages of the districts of Badin and Thatta in Sindh province). At least 0.6 million people in 5,200 villages were affected. 82,181 houses were destroyed and 67,285 damaged. Some 400,000 acres of agricultural land were inundated with salt water, and 28,000 livestock perished. 675 fishing boats were destroyed and 191 people, mostly fishermen, were reported killed¹⁷.
27. The low-elevation coastal zone (LECZ) having an elevation below 10 m spreads over vast areas of about 12,250 sq. km (94 percent) of delta, thus, highly vulnerable to coastal inundation. Almost, all major cities of the delta are located in LECZ, hence are under high risk of coastal flood inundation¹⁸. The economic impact of this exposure is huge on agriculture when two crop seasons (Rabi and Kharif) are affected. About 70 percent of the cultivable area of the delta is cropped during the during Rabi and Kharif seasons. The estimated agricultural economic loss of delta due to coastal flooding in Kharif season could be estimated as Rs. 30 billion from rice only while in Rabi it could be in the range of Rs. 27 billion¹⁹. Except for agricultural loss, environmental, ecological and infrastructure losses would also be severe.
28. With sea level rise and decreased flow of freshwater in Indus River, the sea is encroaching Indus's delta and the courses Indus has left in Thatta. The sea intrusion is also severely affecting the aquifers at many places in the district where groundwater and lands have become saline.

¹⁴ <https://reliefweb.int/report/pakistan/2022-pakistan-floods-assessment-crop-losses-sindh-province-using-satellite-data>

¹⁵ Climate Change in Pakistan, Focused on Sindh Province. https://www.pmd.gov.pk/report_rnd.pdf

¹⁶ Climate Risk Country Profile. World Bank and Asian Development Bank, 2021.

¹⁷ <http://www.mangrovesforthefuture.org/assets/Repository/Documents/A-Handbook-on-Pakistan-Coastal-and-Marine-Resources.pdf>

¹⁸ Dr. Altaf Ali Siyal and Dr. Zia ur Rahman. Impact of Climate Change in the Indus River Delta and Coastal Region of Pakistan. Global Change Impact Studies Centre (GCISC) Islamabad.

¹⁹ Dr. Altaf Ali Siyal and Dr. Zia ur Rahman. Impact of Climate Change in the Indus River Delta and Coastal Region of Pakistan. Global Change Impact Studies Centre (GCISC) Islamabad.

29. The 2022 rains flooded vast areas, casualties rose to 799, and 4.4 million acres of agricultural land were destroyed. Between October 2022 and January 2023, PKR 5.7 billion (approximately US\$20 million) in retroactive financing was utilized for plugging and reinforcing 208 major breaches at bunds, canals, and drains, fixing pumps and motors, and rehabilitating small dams to restore functionality of the irrigation system²⁰.

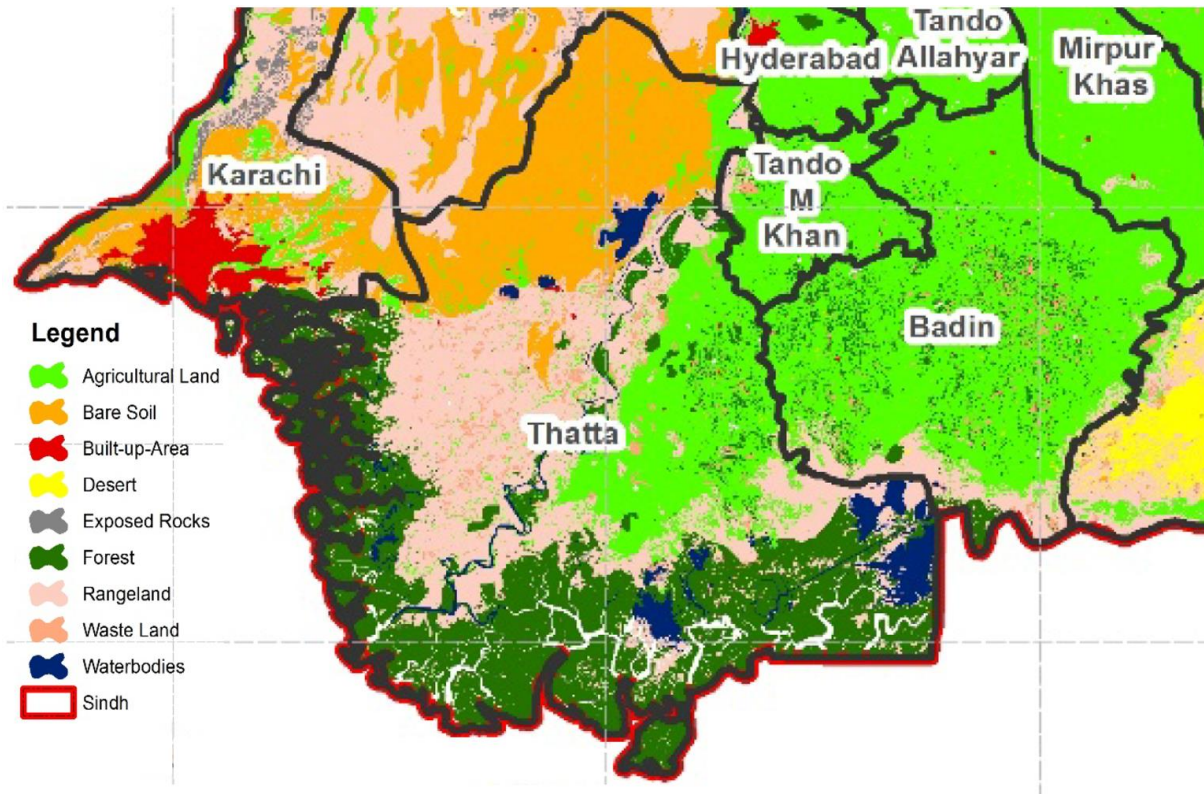


Figure 2 Sindh Topography (from the Sindh Climate Change Policy -2022) – Sujawal was part of Thatta district

2.5 Sensitivity

30. Sensitivity to climate change, in the three project districts, is all the greater as ecosystems are severely degraded, and the rural population is poor, leading to snowball effects.

31. Overfishing, mangroves degradation and climate have been affecting the livelihoods of the fisherfolk. A study in the three coastal districts²¹ has concluded that the income of the fishermen with small boats has reduced as fish is now not available near the shore as compared to a couple of decades back. Fishermen have to go deep into the sea for a good catch, but it cannot be done with small boats and inadequate facilities therein. Similarly, decrease in freshwater lakes in the Indus delta has also adversely affected the livelihoods, incomes and socioeconomic status of the fishing communities.

32. It is estimated that within the period of 2000-2025, the sectors of agriculture, forestry, and fisheries may face a loss of PKR 1.3 billion due to climate change²². Due to heavy reliance of

²⁰ <https://www.worldbank.org/en/news/feature/2023/06/28/rising-from-the-waters-sindh-navigates-recovery-after-the-2022-floods>

²¹ Iqbal and Abro, 2021. Pakistan Journal of Social Research ISSN 2710-3129 (P) 2710-3137 (O) Vol.3, No. 3, September 2021, pp. 106-118.

²² Sindh Climate Change Policy, 2022.

marginalized communities, particularly in rural areas, on natural resources, climate change impacts can significantly reduce their assets, trapping them into a never-ending cycle of poverty.

33. Discussions with communities during field visits revealed that rising debt of the sharecroppers in agriculture and fishing communities was another serious impact among the multiple climate change impacts people were faced with. People have to seek loans after every disaster (floods, drought, cyclones, etc.) from landlords and middlemen which lock them in an unending contract with the lender. Sometimes, the landlords recover the entire harvest as repayment for the Hari's share of the input costs, or as repayment of earlier loans.
34. Researchers found that climate change can lead to conflicts over water and agriculture, all the more sensitive as the districts of Badin, Thatta and Sujawal are highly vulnerable to climate change²³. District Sujawal showed higher vulnerability in adaptive capacity as compared to the other districts due to poor infrastructure and high dependency on natural resources. However, the district of Badin demonstrated high vulnerability in terms of sensitivity and its exposure to conflicts over agricultural resources. The overall Climate-Water Conflict Vulnerability Index (CWCVI) and Climate-Agriculture Conflict Vulnerability Index (CACVI) scores were higher in Badin and Thatta, respectively.
35. Badin is exposed to sea intrusion and cyclones. Climate change and extreme events create risks and vulnerabilities in a number of key areas within the local ecosystem and livelihood structure. According to the data from the District Revenue Office of Badin, the cropped area has reduced from 203,000 acres in 2001–2002 to 153,000 acres in 2005. According to farmers, the sea erosion has turned more than 85,000 acres of cultivable land into barren patches. The coastal areas of Badin, along with neighboring Thatta district, were home to the best breeds of buffalo, red cows, and camels. However, erratic climate patterns during the past decade have caused flooding, drought, and sea intrusion thereby depleting sources of grass and fodder. The successive floods in 2010 and 2011 have only worsened the situation for large livestock rearing in the coastal areas of Badin²⁴.
36. Climate change has increased high tides in the sea resulting in idle (no work) days for fisherman and damages to boats. Unlike the past, many species of fish, crabs, and shrimps, crabs, lobsters, and prawns are not frequently available near shore and fishermen have to fish in open sea which is expensive for small and poor fisherman due to cost, fuel and maintenance of engines and many fishermen do not afford that affecting their livelihoods.

2.6 Adaptive Capacity

37. A number of institutions, policies, legal acts, programmes exist at the national and provincial level for mitigating the impacts of climate change in the province. The Federal Cabinet approved a National Adaptation Plan (NAP) in July 2023 for an effective response to increasing frequency of climate change induced disasters. NAP is a framework for implementing large-scale environmental adaptation, building climate resilience, promoting inclusivity, facilitating collaboration among different stakeholders, and serving as an effective tool for climate finance mobilization. The plan outlines ten priority areas including addressing increasing water scarcity, protecting natural endowments, urban resilience, human capital development and disaster risk management.

²³ <https://pubmed.ncbi.nlm.nih.gov/35776215/>

²⁴ Climate Change Risks and Vulnerabilities of Badin District in Sindh Province, Pakistan, OXFAM and ADPC. 2014.

38. The government of Sindh has enacted the Sindh Climate Change Policy 2022 enabling the concerned departments and agencies to implement relevant laws, rules and regulations for taking remedial steps for mitigating the impacts of the climate change in different areas. The policy is to ensure that climate action is mainstreamed in the development planning and especially in the economically and socially vulnerable sectors of the economy; and to steer Sindh province towards green growth and climate compatible development.
39. Sindh Environment Protection Agency, Sindh. The Sindh government has established Environmental Protection Agency (EPA) in 1989 and is housed in the Environment, Climate Change & Coastal Development Department that was established in 2016. Regional Offices have been established at Karachi, Hyderabad, Mirpurkhan, Larkana and Sukkur.
40. Sindh Coastal Development Authority is responsible for protecting the coastal areas from different disasters while Irrigation Department is involved in flood control, protection, and drainage. The Sindh Provincial Disaster Management Authority (PDMA) deals with natural or man-made disasters in the province and is mandated to engage in activities concerning all four stages of Disaster Management Spectrum. Agriculture Department (Research and Extension) is one of the major players in implementing and supporting actions by developing salt, heat and drought resistant varieties of crops. Similarly, is the role of Fisheries Department which can support the marine and freshwater fisherfolk in improving their livelihoods.
41. These agencies have been trying to help the affected population during the disasters on emergency basis but have limited financial and human resource capacities to carry out long term measures for mitigating the impacts of climate change. In many cases UN, lending agencies and other NGOs have been actively involved to enhance the capacity of communities and government to meet such challenges.
42. The Agriculture Department is widely present and is already involved with FAO in introducing climate smart agriculture in the coastal districts for the last couple of years and has developed enough capacity to demonstrate the same in IFAD targeted union councils and communities, however, the mobility of this department is usually a constraint in many areas due to lack of resources.
43. Some ongoing projects currently contribute to build capacities related to improved agriculture in the context of Climate Change and high vulnerability in Sindh and in Pakistan. To name a few evolving in Sindh: the World Bank funded "Sindh Water and Agriculture Transformation" (SWAT) Project and the GCF/FAO project "Transforming the Indus Basin with Climate Resilient Agriculture and Water Management - TIBCRAWM". They contribute to strengthen extension services in Climate Smart Agriculture, develop agrometeorological services, implement Integrated Pest and Fertility Management Plan, or improve water management, thereby enhancing the resilience of smallholders. Organizations such as WWF-Pakistan, in addition to mangrove restoration programme, support farmers in testing fodder production in tidal areas, or innovate in tunnel farming to boost farm incomes. SCRP should build adaptation options on these experiences and outcomes.

3. Adaptation options

3.1 Regulatory context for climate adaptation in Sindh

44. The Sindh Government has adopted in 2022 the Sindh Climate Change Policy (SCCP). It is a reference framework for the various interventions in the areas of climate change in Sindh. The vision of the Policy is to define a framework by Sindh government for sustainable socio-economic development that integrates the challenges of climate change in all sectors of its development in order to improve the well-being of the populations. Sindh’s Climate Change Policy comprehensively addresses all possible challenges of Climate Change adaptation and mitigation in foreseeable future; and sure to provide rock solid foundational framework for ensuing Climate Change Action Plans, Programs and Projects.
45. The SCCP adopted a series of proposed measures in various sectors, including agriculture, livestock, water resources and fisheries that should guide the SCRP (the numbering has been adopted for ease of future reference).

Proposed policy measures for Adaptation in AGRICULTURE (A)	
A.1	Take measures to reduce crop failures, and improve crop health by reducing disease outbreak and impact of extreme events
A.2	Promote use of climate resilient, organic (fertilizers & pesticides), and high yielding inputs and practices
A.3	<i>Commission relevant institutions and departments to undertake scientific studies on plant-pathogen relationship and patterns of pest and disease spread specific to Sindh and specific to projected changes in temperature</i>
A.4	<i>Develop appropriate digital simulation models for assessment of climate change impacts on physical, chemical, biological and financial aspects of agricultural production systems in various agro-ecological zones</i>
A.5	Reduce migration to urban areas by providing farmers and communities localized livelihood diversification options
A.6	Improve demand forecast, access to farm produce, market structures & supply chains, ensure value addition of produce
A.7	Through viable legislation and land-use planning ensure that fertile land is prioritized for agricultural use and discourage conversion of this land for town planning, non-agricultural purposes, and deforestation
A.8	<i>Establish climate change units or centers at agriculture research organizations in the province to; categorize areas according to their vulnerability to extreme climate change events, climate resilient crop varieties, modern farming techniques</i>
A.9	Promote water efficient farming techniques, especially in low rainfall areas, such as drip irrigation, precision farming, laser levelling, and nutrient management etc.
A.10	Increase reliance on crops & agricultural inputs, and improve food security
A.11	Reduce the soil degradation caused by water logging, and salinity through crop rotation techniques, water efficiency, and rainwater harvesting
A.12	Introduce cropping zones and new crop rotations as per climatic conditions of different areas of the province
A.13	Introduce bio-pesticides and bio-fertilizers for soil conservation
Proposed policy measures in Adaptation in LIVESTOCK (L)	

L.1	Promote local high pedigree and drought-resistant varieties of livestock and poultry to reduce disaster risk to livestock and livelihoods
L.2	Diversify income streams in the livestock sector by treating livestock as saleable asset and animal by-products as fuel and recognizing their role in poverty reduction, resilience building, and increasing food security
L.3	Arrange livestock management training programmes for farmers, including women, especially during disasters
L.4	Improve grassland and grazing management by controlling intensity and timing of grazing
Proposed policy measures in Adaptation in WATER RESOURCES (W)	
W.1	Promote water-efficient irrigation strategies such as drip/ sprinkle irrigation in order to conserve water in the highest water consuming sector.
W.2	Promote rainwater harvesting in villages as localized solution for improving availability of water
W.3	Develop and implement integrated water resource management
W.4	Regulate, monitor and protect groundwater usage especially in the coastal areas to curb sea-water intrusion in coastal aquifers
W.5	Introduce laws pertaining to private sector usage (domestic and industrial) of water and enforcement of existing laws to protect the water resources of the province.
W.6	<i>Prepare an up-to-date inventory of water resources for the province, including surface and ground water</i>
W.7	Address the needs for additional water storage and distribution infrastructure particularly small dams in arid/ semi-arid areas of the province and improve municipal water resources and infrastructure
W.8	<i>Increase expenditure on research in the water sector to minimize water losses and encourage conservation practices.</i>
W.9	<i>Strengthen the capacities of relevant stakeholders and government officials for monitoring, protection and conservation of water resources including municipal water authorities.</i>
W.10	<i>Ensure access to water in arid areas of the province and invest in building early-warning systems in the face of natural hazards such as floods and droughts.</i>
W.11	Reverse Osmosis Plants to be employed in areas that lack water fit for human consumption.
Proposed policy measures in Adaptation in FISHERIES (F)	
F.1	Adopt integrated ecosystem approach with three main pillars: managing fisheries and aquaculture; adapting to climate change; and reducing risk from natural disasters
F.2	Promote and develop to climate resilient, indigenous, and high yielding fish varieties
F.3	Initiate training programs on sustainable fishing techniques and business development skills for small scale farmers especially the fisherwomen
F.4	Formalize fish farms and aquaculture as an industry
F.5	Promote use of low energy intensive technologies which increase heat recovery in refrigeration and encourage the use of solar water heating on fish farms
F.6	<i>Protect the fish habitats including Mangroves (Marine) and terrestrial ecosystems (Fresh water) by strengthening regulatory regime to reduce the release of harmful</i>

chemicals from industrial and municipal sources and control the use of illegal fishing techniques

- F.7 Fill critical gaps in knowledge to assess the vulnerability of fisheries and aquaculture to climate change, especially on small scale farmers
- F.8 Improve lives and livelihoods of fisherman through sustainable management of fisheries and its by-products
- F.9 *Devise strategies for maintaining current and restoring damaged ecosystems to respond to the challenges faced by wildlife due to climate change*

3.2 General considerations

46. Communities informed during field visits that awareness campaigns have been run under different projects and they were now adapting to the prevailing environment to protect their lives, homes and livestock from the disasters. In some cases, new houses and animal sheds are built on about 4 to 5 feet higher platforms to protect from floods. Also, protection bunds are constructed with local material and plantation carried out to protect their soils from erosion.
47. The project components are designed to encourage livelihood diversification, and climate adaptation considerations in order to face the problems in the context of climate change. Building the capacity of vulnerable target groups to diversify activities through investments in new/alternate means of income generation including off-farm enterprises, skill development for employment and business development, value chain development and participation, productive asset ownership etc. together with provision of climate resilient support infrastructure and awareness are key interventions of the project. **The vulnerable groups (women, the poor, and young people) will become more resilient to hazards associated with climate change as a result of increased and diversified incomes and capacity, and training components included in the project.**
48. Smallholder farmers and target groups display a moderate awareness of climate risks and related adaptive and mitigation measures. Project efforts to build the adaptive capacities of its beneficiaries will emphasize the need for disaster risk planning, climate resilient cropping, better land agreement (to ensure that investment in soil quality pays off), drought management practices, and reduced post-harvest losses, among other interventions that build the beneficiary's capacity to cope with, or recover from, the effects of climatic shock events. **The Project will work with them under component 1 for 2 to 3 years of crop seasons for sustainable adaptation of the proposed interventions.**
49. The ever-decreasing water flows in the deltaic region and its impact on marine life, due among other things to decreased sediment and nutrients flow to the sea, have already impacted deltaic and marine life. At the same time, trawlers and new fishing nets are catching everything in the sea threatening population of fish on one hand and livelihoods of small fishermen on the other. The Sindh Fisheries Department and the project will work with the concerned communities to promote use of safe and sustainable fishing gears to prevent entanglement of and damage to marine life (under component 1). Local fishermen and coastal area inhabitants should be trained to monitor and inform the concerned line departments of any changes in sea currents and fish stock movement. The inland habitat of the fish in the lakes will also be protected with the involvement of local communities and Fisheries Department. The Project will also promote aquaculture farms at potential sites and will avoid

activities in the vicinity of water bodies in the target districts that will have any negative impact on the biodiversity and natural habitat of flora and fauna.

50. New business opportunities (Component 2) can provide sustainable inputs and services to agriculture, livestock and fisheries/aquaculture, supporting their transition to climate adaptation.
51. Research, experimentation with participation of smallholder should be supported to test innovative measures accessible for rural poor communities. This is the purpose of the innovation change funds under Component 3, to develop participative new solutions oriented to market and business opportunity and social resilience.

3.3 Climate adaptation project proposal

52. SCRP is guided by the national priorities for climate change adaptation and the adaptation options assessment have been further explored during design. They should be finalized exercises under project inception phase. Furthermore, it is proposed that PMU every year address a report to GoS and explain to what extent, project activities have contributed to, and/or have mobilized the measures of the Sindh Climate Change Policy.
53. The IFAD Adaptation Framework has been used. It is a database of adaptation options (completed with literature review of document in Sindh, lessons learned from IFAD projects and consultation during design mission) and a system for the assessment and prioritization of these options have been developed as part of IFAD's Adaptation Framework. The prioritization process consists of two main elements. First, adaptation options are filtered based on the project sector and climate risks identified during the climate screening process. A Multi-Criteria Analysis (MCA) is then carried out on the shortlisted adaptation options to help select measures to integrate into the project using the following criteria assessed from 1 to 3:
 1. Technical feasibility
 2. Cost-benefit ratio
 3. How well the option addresses risks in the project context
 4. Complementarity to other IFAD themes
 5. Flexibility (i.e., avoids lock-in)
 6. Mitigation co-benefits
 7. Transformative potential
 8. Accessibility for small-holder farmers
54. Then each of the proposed adaptation measure have been classified vis-à-vis the SCCP measures listed above.

Sector/Approach	Ranking score (/24)	Practices
CSA / Agroecology	22	Reforestation / hedge (to reduce impact from weather extremes and spread of pest
CSA / Agroecology	21	Kitchen garden associated with cash crop
CSA / Agroecology	20	Maximizing crop, soil and animal biodiversity to reduce diseases and pest outbreaks (Diversify agricultural activities within single farm units)
CSA / Agroecology	20	Research traditional farming practices to identify approaches that may be suited to a different climate
CSA / Agroecology	20	growing onion, sugarcane and wheat in ridges, instead of the traditional cotton-wheat rotation
CSA / Agroecology	20	Training on best harvest timing and technics
CSA / Agroecology	20	Integrated Plant and Soil Nutrient Management (IPSNM)
CSA / Agroecology	19	Optimize crop calendars
CSA / Agroecology	18	Test and promote Agroforestry
CSA / Agroecology	18	Intercropping to replace the kind of monoculture that has been causing disease infestation, land degradation and decreased output of major crops
CSA / Agroecology	18	Improved semi-dwarf wheat cultivars available in Pakistan
CSA / Agroecology	17	Selection of species (animal and vegetable) more adapted to the environment (water needs, extreme hot temperature, soil salinity, short cycle varieties)
CSA / Agroecology	17	Maximizing organic matter production through green manure, cover crops and agro-forestry
CSA / Agroecology	17	Increased use of livestock manure as a cost-effective fertilization strategy that also builds up organic matter in the soil
CSA / Agroecology	17	Use of improved open pollinated crop varieties which are more resistant and productive
CSA / Agroecology	17	Bio-fertilizers
CSA / Agroecology	17	Make use of integrated systems involving livestock and/or aquaculture to improve resilience.
CSA / Agroecology	16	Intercropping maize with cotton
CSA / Agroecology	16	Recover and use all kind of crops residues (such as banana leaves, Rice => paper with the strow + textile, husk in briquets and in alcohol (for fuel) via bio fermentation process; Sugarcane => burning to make electricity) for income diversification with no/limited pressure on ecosystem
CSA / Agroecology	16	Ensilage of corn residues as food for cow fattening
CSA / Agroecology	16	Improving crop rotations by growing legumes as food crop or live mulch (cover crop)
CSA / Agroecology	15	Split fertilization
CSA / Agroecology	15	Develop soilless production (livestock and crops such as Goat raising and ginger cultivation)
CSA / Agroecology	15	Produce fodder on tidal areas (resources diversification, ecosystem protection, livestock)
CSA / Agroecology	15	Enhancing natural processes of nutrient recycling through managing plant-soil-pest-predator interactions;
Water management	19	Small reservoirs

Water management	19	Raised bed systems
Water management	18	Construct new water harvesting infrastructure // Improve existing water harvesting infrastructure (incl. trap and collect run-off and rainwater to maintain productivity of pasture)
Water management	18	Alternate wet and dry rice with line sowing, which saves water and increases the plant population (resulting higher yield and income as compared with the traditional method)
Water management	16	Identified the Professional Beneficiaries trained in the water and agriculture sectors to use IT tools to inform planning and decision-making related to climate change, agriculture and water.
Water management	16	Laser land levelling to ensure homogenous water application, water saving, uniform germination and decrease water ponding in the field (resulting in higher yields)
Water management	15	Animal shelter
Water management	15	Direct seeding rice, which saves water, time and costs associated with traditional transplanting and inputs (resulting in higher yields and income)
Water management	13	Change approach to farmland management to work with flooding, rather than fighting against it (particularly in flood plains where flood sediments increase productivity of pastures)
Water management	13	Improve efficiency of water consumption through smart irrigation and drop irrigation technologies, smart control systems and reduce water loss and water delivery
Water management	13	Market-based pricing of irrigation water to encourage water-thirfty and water productivity
Livestock	21	Use non-climate sensitive sources of fodder
Livestock	19	Preventive animal health programme for livestock
Livestock	19	Diversity sources / type of feedstock
Livestock	19	Move livestock to higher ground in dry season
Livestock	16	Build larger fodder storage facilities
Livestock	13	Cut and carry fodder system
Livestock	13	Reduce grazing intensity to reduce soil erosion; Re-schedule grazing patterns
Fishery	20	Install and maintain low-cost fish aggregating devices (FADs) for subsistence fishers
Fishery	19	Promote culture-based fisheries (CBF) and stock enhancement practices. [e.g. collecting wild or farmed seed/larvae/fingerlings, growing them to sizes at which they have higher survival rates and then releasing them.]
Fishery	19	Support the transition to new fishing gear and identify and promote fisheries that target underexploited species.
Fishery	13	Seaweed production in tidal areas for methane production or fodder
Aquaculture	19	Upgrade aquaculture facilities to withstand extreme weather and disasters [e.g nets or higher dykes to withstand flooding, landing site, safer boat)

Aquaculture	19	Promote brackish-water aquaculture systems on flooded and/or salinized land and water bodies for coastal agro-communities whose land has been lost. This can include cultivation of aquatic plants for consumption and for production of useful products, such as biofuel, plant protein and alcohols. In the longer term, such systems can rehabilitate the soil.
Aquaculture	19	Test, in Sindh condition, integration of aquaculture with agriculture [rice-fish or poultry-fish; water reservoirs and canals]
Aquaculture	19	Promote best management practices (BMPs) and biosecurity in aquaculture production models
Aquaculture	17	Encourage Integrated Multi-Trophic Aquaculture (IMTA)
Aquaculture	17	Improve aquaculture farm siting and design
Aquaculture	15	Shift sensitive species upstream; introduce marine or euryhaline species (wide salinity tolerance); use hatchery seed, protect broodstock and nursery habitats
Aquaculture	13	Fish meal/oil replacement; better feed management; genetic improvement for alternative feeds; shift away from carnivorous species; culture of bivalves and seaweeds
Food processing and storage	22	Improved stoves at village level and in fishery processing (Reforestation: supporting measure to ADB component)
Food processing and storage	22	Early warning systems for food transportation
Food processing and storage	21	Immediate drying techniques
Food processing and storage	21	Training on optimum temperature range, Temperature and humidity sensors, and preserving techniques
Food processing and storage	20	Safe, efficient routes for transportation of fresh food
Food processing and storage	17	Climate proof warehouses
Food processing and storage	17	Cold chains, cold rooms, ventilation and ice cooling
Food processing and storage	17	Change post-harvest practices, for example the extent to which grain may require drying and how products are stored after harvest.
Food processing and storage	16	Insulation of refrigerated trucks
Food processing and storage	15	Reduce time of storage
Market	20	High value crops
Market	19	Contract Farming
Transversal	22	Diversify livelihoods / create income sources from activities other than agriculture, fisheries and forestry, and if possible protecting the ecosystems
Transversal	20	Seek to reduce other pressures on the forest to increase its resilience to climate change

Transversal	20	Ensure adequate numbers of agriculture department and NGO staff and necessary equipment for emergency repairs to damaged buildings and infrastructure
Transversal	20	Consider the effect of new weather patterns on the health and well-being of agricultural workers.
Transversal	19	Establishment of agriculture service hubs (or farm service centres) at Tehsil level oriented to resilient agriculture
Transversal	19	Train staff to build understanding of climate change / improve operational performance in dealing with climate risks
Transversal	18	Loans provisions for smallholder with mandatory climate adaptation plan to the borrower
Transversal	17	Oriente the innovation fund to Climate adaptation
Transversal	17	Climate proofing of engineering norms and building codes (for equipment provided by the project)
Transversal	16	Enhance markets and trade's contribution to stability of food security - e.g limiting trade restrictions
Transversal	13	Agriculture, Livestock and Aquaculture insurance

Pakistan

Sindh Coastal Resilience Project

Project Design Report

Annex: Scrp Annex 7 Template For Fm Arrangements In The Pdr

Mission Dates: 29 October to 10 November 2023

Document Date: 04/09/2024

Project No. 2000003511

Report No. 6853-PK

Asia and the Pacific Division
Programme Management Department



Template for Detailed FM arrangements in the Project Design Report (PDR) [former Annex VII]

I. Summary of Financial Management arrangements

1. As a member of the project design team (PDT), the Finance Officer has completed the assessment of financial management capacity and risks in accordance with FMD guidelines and templates.
2. As part of this assessment, we conducted a series of reviews and meeting with counterparts of the Sindh Technical Education & Vocational Training Authority, Agriculture Department, Livestock and Fisheries Department and Planning & Development Board of the Government of Sindh, Sindh Rural Support Organization, NRSP Microfinance Bank, State Bank of Pakistan, Habib Bank Limited.
3. We visited Karachi and the three target districts of Sindh – Thatta, Badin and Sujawal to conduct the FM assessment. We met with representatives of the Government of Sindh in Karachi and the representatives of Government for the three target districts. We also visited existing local non-governmental organizations, other UN agencies such as FAO and WFP and the beneficiaries. The mission also met with the Asian Development Bank design team.
4. The most recent PEFA assessment reflects that budget credibility show a considerable improvement at the national level with improvement in the predictability of public expenditure over three years, however issues persist at the subnational level with common and recurring high levels of deviation from budget. The extent of unreported foreign assistance and systematic procedures for monitoring consolidated fiscal risk remain a concern. The country’s risk rating continues to be “High” with its CPI score of 27, dropping four points from previous year. Pakistan’s Corruption Perception Index (CPI) ranking is 140 out of 180 countries in 2022 and it has averaged 25.73 points between 1996 and 2022. This reflects that corruption remains endemic in all branches of the government.
5. The overall FM risk is high with high inherent and project control risks. Actions introduced to mitigate risks and from lessons learnt from previous projects in the country include (1) start-up funds for prompt operationalization of the PMU and to ensure adequate & timely recruitment of staff; (2) complete AWPB and PIM, before disbursement, ensure PIM includes clear guidelines that adapt with the project design and activities; (3) procure an accounting software that meets the project needs at start-up phase; (4) implement internal audit function or similar internal mechanism through compliance verification by Accountant General of Pakistan or through World Bank/Government of Pakistan established internal audit organ.; (5) early coordination with the Auditor General of Pakistan for timely delivery of the audit reports and timely settlement of audit findings. These actions will be included in the loan covenants and are described in more details in section B of this annex.

II. Project financial profile¹

6. Total project cost is estimated at US\$ 164 million, to be financed through: (i) an IFAD loan in the amount of US\$ 60.0 million, (ii) a financing gap of US\$ 40 million potentially to be financed by IFAD with the 2025 - 2027 PBAS allocation; (iii) Government contribution in the amount of US\$ 6.7 million; (iv) beneficiary contribution of approximately US\$ 2.7 million; and (v) 4P private sector and commercial Banking sector contribution in the amount of US\$ 0.9 and 53.1 million respectively.
7. The government’s share in financing comprises counterpart funding for payment of applicable taxes and other in-kind contributions as well as project management costs. PMU shall open a separate Assignment Account to receive and use government counterpart funds (cash) for taxes and project management. The

¹ Note that COSTAB and Financing Plan may be finalized at a later date after the design mission. In such cases this section, as well as other relevant information, should be revised and updated by the Finance Officer before the President’s Report is presented in Scriptoria for FMD clearance.

Detailed FM Arrangements in the Project Design Report (PDR)

annual requirement of counterpart funds shall be reflected in the project's AWPB and provincial budget. The accounting system shall record government financing separately.

8. The project consists of three complementary components that address the causes of vulnerability, poverty and low incomes of various bands of income groups in target rural communities i.e. smallholder farmers, tenants, sharecroppers, fishermen and landless poor. It will be done in a gender and youth sensitive manner with a principle of 'No-One-Left-Behind'.
 - a. Transformation of Coastal and Rural Incomes: Coastal and Rural communities organized and assisted to develop capacities for market oriented improved productivity and production Resilient to the climate and ecosystem contexts, and value addition and transition to higher value outputs/products, based on structured sustainable value chain plans supported through community and value chain support infrastructure, sustainable access to affordable financial services, and strengthened extension and skill development services provision.
 - b. Economic and social Inclusion of Disadvantaged Groups: (job market and small business development), facilitated for the poor landless households, in particular young men, and women through provision of employable skills, income generating productive assets, start-up grants for self-enterprise development through tailored business, technical and vocational service provision.
 - c. Project Management and Policy Support: Establishment of an efficient project management structure: a Project Steering Committee, Project Management Unit and District Coordination Units; policy review and reform assistance on key areas of economic and social aspects affecting smallholder agriculture including access to quality inputs, credit and insurance services, land-titling for housing in buffer zone etc. support for innovative projects, focused on local sustainable development, and encouraging GEWE, youth inclusion, better nutrition and climate adaption.

9. Categories and components financing

Table 1: Programme/project costs by component (and sub-components) and financier

(Thousands of United States dollars)

Islamic Republic of Pakistan Sindh Coastal Resilience Project Components by Financiers	(US\$ '000)							
	4P						Commercial Banking Sector	Total
	IFAD Loan	GoS	Financing Gap	Private Sector	Beneficiary Contribution	Banking Sector		
	Amount	Amount	Amount	Amount	Amount	Amount	Amount	
A. Transformation of Coastal and Rural Incomes								
1. Organization, Planning & Training	2,863	113	551	925	-	-	4,452	
2. Community and Value Chain Support Infrastructure	13,069	1,449	17,204	-	2,756	-	34,477	
3. Financial Inclusion	15,409	-	6,721	-	-	53,132	75,262	
4. Institutional Support	1,325	300	372	-	-	-	1,997	
5. Challenge fund and policy support	1,343	653	1,472	-	-	-	3,469	
Subtotal	34,008	2,515	26,321	925	2,756	53,132	119,657	
B. Economic and Social Inclusion								
Economic Graduation of Landless Poor	9,463	1,393	6,885	-	-	-	17,741	
Job Market Integration of Youth	10,135	-	4,708	-	-	-	14,843	
Intituational Support to STEVTA	1,227	-	457	-	-	-	1,684	
Subtotal	20,825	1,393	12,050	-	-	-	34,268	
C. Project Management & Implementation Support								
Project Management	2,628	2,156	388	-	-	-	5,172	
Implementing Partners	2,540	667	1,241	-	-	-	4,448	
Subtotal	5,167	2,823	1,630	-	-	-	9,619	
Total PROJECT COSTS	60,000	6,731	40,000	925	2,756	53,132	163,544	

Detailed FM Arrangements in the Project Design Report (PDR)

Table 2: Project/programme] costs by expenditure category and financier

(Thousands of United States dollars)

Islamic Republic of Pakistan Sindh Coastal Resilience Project Project Cost By Expenditure Category and Financiers	(US\$ '000)						
	IFAD Loan	GoS	Financing Gap	4P Private Sector	Beneficiary Contribution	Commercial Banking Sector	Total
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
1. Civil Works/ Community Infrastructures	13,069	1,449	17,204	-	2,756	-	34,477
2. Vehicles	304	54	-	-	-	-	357
3. Computer and Equipment	95	17	-	-	-	-	112
4. Credit	15,378	-	6,721	-	-	-	22,098
5. Technical Assistance, Trainings, Workshops and Studies	12,141	798	6,370	-	-	-	19,310
6. Grants and Subsidies	13,497	1,496	7,889	925	-	-	23,808
7. Private Sector	-	-	-	-	-	53,132	53,132
8. Salaries and Allowances	1,086	1,051	199	-	-	-	2,335
9. Operating Costs	4,431	1,867	1,617	-	-	-	7,915
Total PROJECT COSTS	60,000	6,731	40,000	925	2,756	53,132	163,544

Table 3: Programme/project costs by component and year

(Thousands of United States dollars)

Islamic Republic of Pakistan Sindh Coastal Resilience Project Project Components by Year -- Totals Including Contingencies	Totals Including Contingencies (US\$ '000)							
	2025	2026	2027	2028	2029	2030	2031	Total
	A. Transformation of Coastal and Rural Incomes							
1. Organization, Planning & Training	53	283	662	859	874	860	860	4,452
2. Community and Value Chain Support Infrastructure	999	3,317	3,787	8,341	7,775	5,767	4,491	34,477
3. Financial Inclusion	8,483	6,795	9,283	18,030	13,928	18,743	-	75,262
4. Institutional Support	653	237	231	224	220	216	216	1,997
5. Challenge fund and policy support	200	435	708	1,096	809	221	-	3,469
Subtotal	10,389	11,068	14,670	28,549	23,606	25,808	5,568	119,657
B. Economic and Social Inclusion								
Economic Graduation of Landless Poor	1,520	2,377	2,898	3,069	3,127	2,692	2,058	17,741
Job Market Integration of Youth	1,050	2,031	1,888	3,127	3,099	2,962	685	14,843
Intituational Support to STEVTA	807	54	87	541	82	80	33	1,684
Subtotal	3,377	4,462	4,873	6,737	6,309	5,734	2,776	34,268
C. Project Management & Implementation Support								
Project Management	1,126	652	662	665	671	683	713	5,172
Implementing Partners	288	484	755	877	689	678	677	4,448
Subtotal	1,414	1,136	1,417	1,541	1,360	1,361	1,390	9,619
Total PROJECT COSTS	15,179	16,665	20,961	36,828	31,275	32,903	9,734	163,544

III. Implementation Arrangements

10. An autonomous and empowered Project Management Unit (PMU) at Karachi, administratively linked to P&D Board, and reporting to Project Steering Committee, will be responsible for project planning, coordination, financing, monitoring and procurements. Chairman P&D Board will head the PSC and the rest of membership will be drawn from relevant line departments, Finance Department, and civil society. A competitively selected Project Director will head the PMU, supported by adequate number of professional and technical support staff including finance, procurement, infrastructure, agri-business development, climate, gender, nutrition and M&E. Management of IFAD and government counterpart funds will be through separate assignment accounts. Annual Workplans and Budgets (AWPB), approved by PSC, shall guide the project implementation and progress reporting.
11. A District Coordination Unit in each of the three target districts, headed by a competitively selected Project Coordinator and supported by a small team of professional and support staff, will be responsible for planning, coordination, monitoring and reporting of project activities based on Project's AWPB. Partner government implementing agencies will nominate dedicated activity managers at provincial and district levels, and specified field level staff, for project related activities.

Detailed FM Arrangements in the Project Design Report (PDR)

12. Scope of work of these agencies will emerge from VO and Interest Groups' plans and will be used as a basis for MOUs between PMU and implementing agencies. Project will finance necessary operational and input budgets identified in the MOUs for the work related to these agencies. The potential implementing agencies include Agriculture Extension Department, Livestock and Fisheries Department, Sindh Irrigation and Drainage Authority and STEVTA. Some other private and public sector agencies may emerge as implementing partners based on VO development plans and technical and vocational training activities. PMU will have the freedom to engage them subject to detailed TOR and financial terms duly approved by PSC.
13. To avoid the risk of start-up delay, the core PMU staff (Project Director, Finance Manager and Procurement Manager) and the District Coordinators and Accounts Officers will be recruited three months prior to project effectiveness so as to complete the preparatory activities like preparation and approval of first year AWPB and Procurement plan, identification and hiring of PMU and DCUs buildings, recruitment process initiation for support staff, orientation of public sector partners and procurement of Business Development Partner(s) is completed on time.
14. PMU location in Karachi will provide access to relatively more competent pool of FM staff. Finance Manager will be competitively recruited on market-based salary and selection will require a No Objection from IFAD. Finance Manager will be assisted in his functions by competitively recruited Accounts Officer, a Budget & Finance Officer and two Accounts Assistants. Project will have largely centralized FM arrangements with all major procurements and service provision payments managed at PMU level. Each DCU will have one Accounts Assistant as the DCUs will manage only small operational budgets for the running of their offices. TOR for FM Section staff is provided in PIM.

IV. Financial Management Risk Assessment

Summary	Brief description of issues	Inherent Risk at design H/S/M/L	Covenants precedent to disbursement	Residual Risk ² H/S/M/L	Agreed Mitigation Measures
A. Inherent risk assessment pillars					
i. Country level	<p>Pakistan has a score of 27/100 and is ranked 140/180 in the 2022 Corruption Perception Index released by Transparency International. Pakistan’s score has experienced a statistically significant down trend since 2017 culminating in a decline of CPI score from 33 in 2018 to 27 in 2022. In 2022, Pakistan ranks below the Asia Pacific average score of 45/100. One key concern is a weakening of anti-corruption institutions or, in some cases, absence of an agency to coordinate action against corruption.</p> <p>Pakistan scored 21% in the assessment of extent to which public office holders who abuse their position are penalized, and 35% in the assessment of the risk that individuals or organizations will face bribery or other corrupt practices when conducting business. According to the Global Corruption Barometer of Transparency International, 35% of people thought corruption increased and 25% of public service users paid a bribe in the previous year since the most recent publication of the GCB for Asia Pacific in 2017.</p> <p>Concerning the public financial management systems, the most recent publicly available PEFA assessment in 2012 reflects that budget credibility show a considerable improvement at the national level with improvement in the</p>	H	Ring-fenced nature of the PMU and its operationalization will be well detailed in the financing agreement.	N/A	Set up of a ring-fenced PMU with tailored FM and implementation arrangements to minimize the country and entity level risks.

² The residual risk may take into consideration the effects of mitigating actions included in the FA covenants precedent to disbursement. Therefore, the residual risk may be slightly different from the inherent risk in case we have evidence that the actions included in the FA covenants have shown to be effective in that specific context.

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	<p>predictability of public expenditure over three years, however issues persist at the subnational level with common and recurring high levels of deviation from budget. Some improvements were realized in terms of budget transparency but the extent of unreported foreign assistance and systematic procedures for monitoring consolidated fiscal risk remain a concern.</p> <p>PEFA for Sindh (2020) analysed provincial performance against the 2013 assessment baseline. While some improvements were noticed under the seven pillars and 33 indicators, many problem areas persisted. These included, unpredictability of federal transfers, weak linkages between policy and budgeting, inefficient use of development funds, data integrity issues, manual and IT based accounting system running in parallel, weak internal audit, and delays in submission of audit reports to the legislature.</p> <p>With regards to accounting, recording, and reporting, issues have been highlighted from introduction of GFMS such as a large backlog of unresolved reconciling differences. The annual financial statements are timely but lack inclusion of complete information on financial assets and liabilities. In terms of external audit and scrutiny, the quality and timeliness of audit is adequate, however lacking legislative scrutiny and other oversight. One improvement noted is the scrutiny of audit reports by the most recent Public Accounts Committee (PAC) that has been extensive and succeeded in addressing the large backlog of audit reports reviews.</p>				
<p>ii. Entity level</p>	<p>The Planning and Development Board of the Government of Sindh would be the lead implementation agency. The Planning & Development Board is headed by a chairman and supported by Members for key sectors. It is the lead provincial development planner as well as coordinator for international development assistance. The P&D Board will be responsible for timely completion of Project PC-I for internal government approval processes as well as timely recruitment of PMU and DCU staff to ensure that project implementation starts as per agreed timelines. While the agency is relatively well staffed and has experience</p>	<p>H</p>	<p>Distinct role of the P&D Board to provide oversight and governance over activities will be defined in the financing agreement. The responsibilities of the PMU would also be stated to avoid conflation of roles.</p>	<p>N/A</p>	<p>Set up of a ring-fenced PMU with tailored FM and implementation arrangements to minimize the country and entity level risks.</p>

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	<p>implementing other foreign aided projects in Sindh, it is susceptible to the risks identified by PEFA below with regards to working with the Government of Sindh.</p> <p>The 2020 PEFA Sindh Government assessment is indicative of many problems including the following:</p> <ul style="list-style-type: none"> • inadequacies in aggregate fiscal discipline as evidenced in the expenditure and revenue outturns. • numerous budget adjustments without legislative oversight or compliance with guidelines issued by the Finance Department and Planning and Development Department. • While there is an internal audit function established and housed within the Finance Department, its coverage remains limited to a few departments. • An effective internal control framework/charter has led to strengthening of internal controls in some departments. However, the coverage of internal audit functions is limited in scope and focus and thus does not improve the weak internal controls. The Public Accounts Committee (PAC) has repeatedly observed the lack of interest of the Executive to comply with its directions. • given the highly centralized payment authorization system and absence of a legal framework, the departments tend to keep unspent balances in private commercial bank accounts and second is the lack of sufficient IT infrastructure makes it difficult to set up a seamless system of e-payment. 				
<p>iii. Project level</p>	<p>SCRIP Is a large project with multiple financiers including ADB, IFAD, Government of Sindh, and beneficiaries. The design plans to bring in the private sector with attractive lines of credits/interest subsidy schemes. It could become very complex to manage if the financial management and procurement procedures are not well elaborated, simple enough and properly imbibed by the project officials and relevant participants. ADB and IFAD will seek complementarity</p>			<p>N/A</p>	

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	<p>where feasible for instance around staffing at the management level, accounting systems and procedures and annual financial reporting and audit requirements.</p> <p>The project is implemented in the three poorest districts of Sindh which means many beneficiaries are not literate and unbanked. i.e., not connected to the formal financial sector. This could place a strain on the reach of the project, traceability of interventions, capacity of beneficiaries to meet requirements of the private sector lenders, etc.</p> <p>The project intends to rely on multiple implementing partners including Agriculture Extension and Research, Livestock and Fisheries Department, Sindh TEVTA and private sector technical and vocational training institutions, private sector agri-business entities and service providers, agri-credit providers, and beneficiary Smallholder Farmer Organizations. Furthermore, considering the wide geographical terrain of the projects with three districts and numerous councils, villages, and community units; the project would need to ensure the implementation and flow of funds arrangement and project organizational structure is adequate to manage these complexities. For instance, not too central to be far from the actual implementation and not too decentralized to make supervision, monitoring and reporting of project activities too tedious and irregular.</p>				
<p>B. Control risk assessment pillars</p>					
<p>1. Organization and Staffing</p>	<ul style="list-style-type: none"> • There may be delays in recruiting and filling vacant positions with suitably experienced and qualified personnel. Root causes may include weak capacity in the job market, interference in the recruitment process and underpayment on projects compared to market price. • The organizational structure of project may be inadequate for the implementation arrangement of the project. 	<p>H</p>	<ul style="list-style-type: none"> • Recruitment of key project staff (including finance personnel) would be set as condition precedent to disbursement. • Implementation arrangements including relevant institutions are 	<p>S</p>	<ul style="list-style-type: none"> • Core staff of the PMU—Project Director, Finance Manager/FM Specialist, FM Specialist, M&E Specialist should be engaged within eight (8) weeks of the date of signing of the Financing Agreement and will be a condition for disbursement of the initial advance. • Institution of a well-structured finance unit within the PCU that includes

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			to be specified in the financing agreement.		<p>competent and qualified staff who can carry out project financial management as per the fund requirements.</p> <ul style="list-style-type: none"> All finance staff to undertake IFAD Online Finance Management practices and procedures course and IFAD anti-corruption training. In addition to that, finance staff to attend induction sessions on IFAD financial management requirements as conducted by IFAD Finance Officer.
2. Budgeting	<ul style="list-style-type: none"> The project will have multiple financiers namely IFAD, ADB, Government Contribution, and Beneficiaries contribution. There is a risk of mix-up in budgeting and expenditure allocations to these multiple financiers. There may be frequent delays in the submission of AWPB. This may arise from delays in sitting and approval by the project steering committees and difficulties in consolidating budgets from the lower levels of implementation. Tough fiscal policies such as the Government’s introduction of rupee covers may result in poor AWPB implementation. The Standby Arrangement (SBA) policies agreed between the Government and IMF may further challenge the implementation of AWPB for IFAD Financing and Government counterpart funds 	S	<ul style="list-style-type: none"> IFAD financed category amounts and percentages should be clearly detailed in schedule 2 of the FA. IFAD NO for the first 18-month AWPB would be a condition precedent to disbursement. The nature and form of Government and beneficiaries’ contribution should also be clearly stated in the FA. 	S	<ul style="list-style-type: none"> A dedicated and fully empowered PCU will be responsible for implementation of IFAD livelihood enhancement component of this co-financed project. With parallel financing mode, there is no risk of mixing of IFAD and ADB funds. Same applies to government counterpart of beneficiary contributions. The cost tables, PDR/PC-1 and PIM will have sufficient details on key activities to be implemented and sources of finances for these costs. Subsequently, the AWPB will be prepared with adequate details on financing for key activities to ensure adequate guidance to the accounting team in booking of the expenditure. PCU shall obtain the approval of AWPB & Procurement Plan through the PSC (by 30 April each year) and shall ensure that counterpart fund requirements of AWPB are reflected in the Annual Development

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					<p>Programme/budget of the provincial government.</p> <ul style="list-style-type: none"> • Appropriate consultations should be held with representatives of the borrower in advance of the workplan development. Annual budget would be communicated in advance of setting the rupee cover. • AWPB/Procurement Plans shall be prepared in consultation with implementing partners/service providers and these IPs will be supported by PMU to ensure proper estimation of funding requirements in the AWPB.
3. Funds flow and Disbursement Arrangements	<ul style="list-style-type: none"> • Sub-optimal disbursement may occur because of delays in the start-up of projects arising from delays in opening bank accounts and fulfilment of the other disbursement conditions. • There may be weakness around traceability of interventions at the beneficiary level. • There is weak capacity at lower levels of implementation such as at the community organizations (COs), beneficiary groups and other sub-national partner organizations (POs). Oversight and monitoring of these organizations by the project management may be ineffective. 	S	<ul style="list-style-type: none"> • Key start-up activities including the setting up of the PMU office would be set as conditions precedent to disbursement. • FA to clearly outline the flow of funds/disbursement arrangements. • Start-up funds provision would be made in schedule 2 of the FA for early disbursement to operationalize the PMU for effective start-up. 	S	<ul style="list-style-type: none"> • A clear and streamlined process of flow of funds for IFAD financing. As per the arrangements, a special designated account for loan disbursement and a separate account for management of government counterpart funds are established with the National Bank of Pakistan (government owned and a subsidiary of State Bank of Pakistan) to provide independent drawing facility. • Designated Accounts for the project will be opened within eight (8) weeks of the date of signing of the Financing Agreement and will be a condition for disbursement of the initial advance. • Counterpart Fund requirements shall be clearly established through timely preparation and approval of AWPB (latest by 15 April of each financial year-before the start of preparation of the

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					<p>government budget and Annual Development Programme process. The AWPB counterpart fund requirements shall be reflected in the provincial Annual Development Programme and budget.</p> <ul style="list-style-type: none"> • The project will utilize IFAD’s technical guidance note on co-financing and in-kind contribution to develop a section in the manual for capturing, monitoring, and reporting in-kind contributions. • Disbursement will be based on validated 6 months cash forecast, and expenses will be justified based on quarterly interim financial report.
<p>4. Internal Controls</p>	<ul style="list-style-type: none"> • Instances of non-compliance with applicable internal controls have been reported by the Auditor General of Pakistan in recent audit reports, as well as in supervision & implementation support missions. • Absence of internal audit function at project management and lower levels of implementation may pose internal control risks. • Contracts and MoUs with implementing partners may not include key clauses on internal controls and reporting requirements. • Inadequate supporting documentation to justify expenditure especially around asset management, travel expenses, and vehicle fuelling and maintenance, raising the risk of ineligible expenditure. • Weak segregation of duties may arise to high numbers of staff vacancy. 	<p>H</p>	<ul style="list-style-type: none"> • Requirement of IFAD NO for the project PIM (including financial management arrangement) would be a condition precedent to disbursement. • Internal audit arrangements would be documented in the FA. 	<p>H</p>	<ul style="list-style-type: none"> • To effectively safeguard project resources, the Office of the Auditor General will be engaged to perform compliance verifications on key project activities and the PMU would also engage the new internal audit function set up by WB/GoP to perform IA for SCRP. • A few internal control measures will be implemented to mitigate risks of internal controls failure such as <ul style="list-style-type: none"> ○ monthly bank reconciliation. ○ budgetary controls over each transaction. ○ budget vs actual analysis and reporting to PSC. ○ maintenance of Fixed Asset Registers and verification of assets randomly/periodically.

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					<ul style="list-style-type: none"> ○ complete documentation of activities especially at the beneficiary level and random/periodic inspection to test credibility of reporting by implementing partners. Details will be provided in the PIM. ● Supervision missions would specifically examine whether the project is in full compliance with these internal control requirements.
5. Accounting and Financial Reporting	<ul style="list-style-type: none"> ● Accounting software may not be adequately sophisticated or customized to meet project reporting requirements. This may result in difficulties to automatically generate required reports from the system, consolidate reports across multiple financing instruments, implementing layers and levels and report on multiple currencies. ● Weak monitoring of physical and financial progress may result in difficulty to track implementation progress and gaps and to take prompt remedial actions. ● Project financial procedures in the PIM may lack enough details to provide guidance to the project staff and may not be updated as at when required. 	S	<ul style="list-style-type: none"> ● Procurement and installation of appropriate accounting software would be a condition precedent to disbursement. 	S	<ul style="list-style-type: none"> ● An appropriate Accounting Software will be procured, installed and the finance team trained in its use. Financial reports should be auto generated from the procured accounting software. ● Integration of the service providers, expenditures in the PMU accounting software. Relevant procedures to be identified in the PIM. The finalization and approval of the PIM Designated Accounts for the project will be opened within eight (8) weeks of the date of signing of the Financing Agreement and will be a condition for disbursement of the initial advance. ● PMU shall submit to IFAD; Quarterly Interim Financial Reports within 30-day of period end, annual unaudited financial statements within 4-month of year end and annual audited Financial Statements within 6-month of year end.

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					<ul style="list-style-type: none"> FM staff should be orientated to comply with IFAD’s requirements in their work—including those relating to IFAD’s Anti-corruption policy. The acquisition of the software including staff training will be part of the start-up activities.
6. External Audit	<ul style="list-style-type: none"> IFAD notes persistent gaps with reference to external auditing of projects which include weak-follow up with audit office resulting in backlog of audit findings, non-resolution of audit findings—which could potentially create ineligible expenditure for the project. Audit may not be required of key sub-recipients of IFAD Financing; hence, Partner Organizations may not submit annual audit reports to the PMUs. This may weaken the levels of assurance over project funds. 	S		S	<p>PMU will be guided by IFAD to:</p> <ul style="list-style-type: none"> Engage with Director General Audit for timely completion of audit. Send scanned copies of the final audit report as soon the report is ready to ensure on-time submission to IFAD and to avoid delays resulting from mail services. Then the hard copy can follow to IFAD ICO in Islamabad. Settle Audit observations within four (4) months after the Audit Report has been shared with project executing agency to ensure early resolution at Departmental Accounts Committee level. Ensure follow up meetings with the Auditors to settle any unsettled audit findings from previous years. Ensure engagement of reputable Chartered Accountant Firm, with IFAD concurrence, for the audit of NGOs and/or any partner organizations.
Overall FM Risk @ design³	Overall, inherent risk at design is high on the back of high country, entity, and project specific risks. Mitigating measures would be enshrined in the loan covenants but are not adequate to reduce the residual risk at this time.	H		H	

³ The Final Risk at design should reflect a combined consideration of inherent and control risks for the project.

V. Financial Management and Disbursement Arrangements

1) Financial management organization and staffing

PMU will have an adequately staffed FM section. PMU location in Karachi will provide access to relatively more competent pool of FM staff. Finance Manager will be competitively recruited on market-based salary and selection will require a No Objection from IFAD.

Finance Manager will be assisted in his functions by competitively recruited Accounts Officer, a Budget & Finance Officer and two Accounts Assistants. Project will have largely centralized FM arrangements with all major procurements and service provision payments managed at PMU level. Each DCU will have one Accounts Assistant as the DCUs will manage only small operational budgets for the running of their offices.

Detailed job description and terms of reference are provided in PIM.

2) Budgeting

All project activities will be guided by Annual Workplans and Budgets, based on PDR and Financing Agreement and duly approved by PSC and IFAD No Objection. AWPB will be prepared by PMU following a consultative process with all implementing partners and DCUs. Plan preparation will follow provincial government budget preparation schedules to ensure that plan budget is reflected in the government Annual Development Plan, reflecting IFAD and government counterpart allocations.

For ease of planning and monitoring, AWPB for each component will be further elaborated in quarterly physical and financial targets which shall become the basis for monthly and quarterly planning and progress reviews. PSC will conduct a mid-year review to assess progress against annual plan and approve any required adjustments, revisions, and remedial measures.

3) Disbursement Arrangements and Flow of Funds

The SCRPMU shall establish a Designated Assignment Account in the National Bank of Pakistan (NBP), Karachi to receive and use IFAD's Loan. As per Federal Government's instructions, the NBP is the designated bank for handling all transactions of assignment accounts. The State Bank of Pakistan (SBP)—which maintains the accounts of foreign aid for Pakistan, shall receive funds from IFAD in USD, convert it at the prevalent exchange rate into local currency, debit the national account for loan, and credit the project's Designated Account accordingly. The project account shall show debits, credits, and balance in PKR along with USD equivalent.

The Revolving Fund modality under the report-based disbursements system will be the mechanism used for withdrawing funds from IFAD financings. Interim Financial Reports (IFRs) package will be used as a basis of submission of withdrawal applications to IFAD. The IFRs package and requirement will be included in the Financial Management and Financial Control Letter (FMFCL) and the PIM during the implementation period. The first advance should be equal to or less than the forecast amount of IFAD financed expenditures approved in the Annual Work Plan and Budget (AWPB) for the period of six months. Further advances to the Designated Account will be made for the next reporting period based on the AWPB or expenditures forecast.

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Each quarter the PMU shall submit the IFRs package (using the templates included in the FMFCL and the PIM) to report on the financial performance and to justify the specified percentages of the withdrawn advances as indicated in the FMFCL.

Project will have two sources of funds- IFAD and Government of Sindh. PMU will maintain separate assignment accounts in National bank of Pakistan for each of the financiers. The government's share in financing comprises counterpart funding for payment of applicable taxes and other in-kind contributions as well as project management costs. The annual requirement of counterpart funds shall be reflected in the project's AWPB and provincial budget. The accounting system shall record government financing separately. PD and Finance Manager will be the cosignatories for the management of bank accounts and disbursements. Apart from meeting PMU and DCUs own operational expenses, most of the investment funds will be expended through implementing partners and VOs. All implementing partners will maintain dedicated project accounts to facilitate tracking of funds disbursed and utilized.

The flow of funds to social mobilization partners will be further elaborated in PIM and will be reflected in their contracts. Flow of funds to other agencies will be based on the activities and expenses agreed in the MOUs signed between PMU and IPs. Based on MOUs and AWPB targets and phasing, PMU may provide initial one quarter advance to IPs. Subsequent releases will be based on submission of account and invoices against the advance, adjustment of any unspent advance, and release of next tranche.

Funds for VO related activities will be transferred to social mobilization partners on the pattern already in vogue in on-going IFAD projects in Pakistan and based on VO and interest groups' approved plans. Each VO will have a bank account which will be co-managed by VO President and social mobilization partner's designated staff. SMP will be responsible for rendering of quarterly financial statements of own and VOs expenses, to the DCU and PMU. PMU Finance Manager will cause inspection of VOs and SMPs' accounts at least once every six months. Detailed financial management framework for PMU and IPs is provided in PIM.

4) Internal Controls and Internal audit arrangements

The internal control arrangements for the project will include: (a) competent personnel with clear responsibilities and adequate segregation of duties; (b) adequate financial records management system with complete and accurate audit trail; (c) physical safeguard including regular verifications and controls for assets and financial documents of the project; (d) independent reviews; (e) clear procedures for timely monitoring and financial reporting from the Implementing Agencies of the project.

To ensure satisfactory internal financial controls, PMU shall engage services of the Office of the Auditor General to perform compliance verifications on key project activities and the PMU will also engage the new internal audit function set up by WB/GoP to perform IA for all foreign aided projects. The TOR and terms of engagement shall be subject to IFAD No Objection. The agencies will submit quarterly reports to PD and comprehensive assessments on project financial management to PSC. These reports should also be made available to the supervision and implementation mission delegations.

5) Accounting Systems and Financial Reporting mechanisms

Project accounting will be managed in accordance with IPSAS Cash basis of financial reporting. PMU, at the very start of the project, shall procure an appropriate accounting software to manage its accounts. For reference, IFAD funded projects in Pakistan portfolio use TOMPRO. PMU shall seek exemption from Public Procurement Regulatory

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Authority (PPRA) rules for single sourcing of this software. The accounting system will manage and track funds in accordance with source of funds, component allocations, spending entities and disbursement categories. Monthly reconciliation will be carried out with the bank and Accountant General Office.

PMU will maintain a full set of supportive records including fixed Assets Register, an invoice register, a cash book and a Contracts register. Necessary safeguards will be established and regularly reviewed to mitigate risks of fraud and to ensure faithful implementation of IFAD's anti-corruption policy.

PMU will be required to submit three types of financial reports to IFAD. Interim quarterly financial reports within 30 days of close of each quarter, indicating progress under each component and expenditure category, duly reconciled with the bank, and signed by Finance Manager and PD. Detailed unaudited financial reports for each financial year within four months of the close of the financial year. And finally, the audited Financial Statements within 6 months of the close of the financial year (end of December each year).

6) External Audit

Auditor General of Pakistan (AGP) shall conduct external audit of the Project accounts. PMU shall submit to the Auditor General office Annual Financial Statements of the project within two months of the end of financial year. External Audit will be completed within six months of the end of each financial year and project audit report together with the management letter shall be furnished to IFAD by 31 December each year. PMU will maintain regular liaison with the Auditor General office post-audit to ensure timely settlement of audit observations in the Departmental Audit Committee.

The AGP has adopted the International Organization of Supreme Audit Institutions (INTOSAI) code of ethics and auditing standards. The AGP will perform special performance and compliance verification of key transactions under an MoU to be signed with the project. The terms of reference for these reviews would be subject to the approval of the P&D Board and IFAD NO.

VI. Implementation Readiness

Table 3: FM Actions Summary: The actions needed to mitigate FM risks are summarised below:

	Action	Responsible Party / Person	Target Date / Covenants ⁴
1	Set up of a ring-fenced PMU – Recruit core staff of the PMU—Project Director, Finance Manager/FM Specialist, FM Specialist, M&E Specialist should be engaged within eight (8) weeks of the date of signing of the Financing Agreement	Lead Project Agency	After project entry into force/disbursement conditions

⁴ Indicate if covenants are required in Financing Agreement for each of these: effectiveness condition or disbursement condition or dated covenant.

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2	Obtain the approval of AWPB & Procurement Plan through the PSC (before disbursement at inception and subsequently by 30 April each year) and ensure that counterpart fund requirements of AWPB are reflected in the Annual Development Programme/budget of the provincial government. AWPB shall be subject to IFAD NO.	Finance Manager, Project Coordinator	After project entry into force/disbursement conditions
3	Designated Accounts for the project will be opened within eight (8) weeks of the date of signing of the Financing Agreement. ICP Signatories will be provided to IFAD.	Lead Project Agency	After project entry into force/disbursement conditions
4	An appropriate Accounting Software will be procured, installed and the finance team trained in its use. Financial reports should be auto generated from the procured accounting software.	Finance Manager, Project Coordinator	After project entry into force/disbursement conditions
5	FM staff should be orientated to comply with IFAD's requirements in their work— including those relating to IFAD's Anti-corruption policy.	Finance Manager	After project entry into force
6	Start-up funds provision would be made in schedule 2 of the FA for early disbursement to operationalize the PMU for effective start-up.	IFAD/ GoP	At negotiation and signing of FA
7	Distinct role of the P&D Board to provide oversight and governance over activities will be defined in the financing agreement. The responsibilities of the PMU would also be stated to avoid conflation of roles.	IFAD/ GoP	At negotiation and signing of FA

FM Supervision plan

IFAD will conduct two full supervision missions in the first year of implementation to assess project progress train project staff in key aspects of management, identify any bottlenecks and provide solutions. Frequency of subsequent supervision and implementation support missions will be determined based on project progress and level of needed support identified.

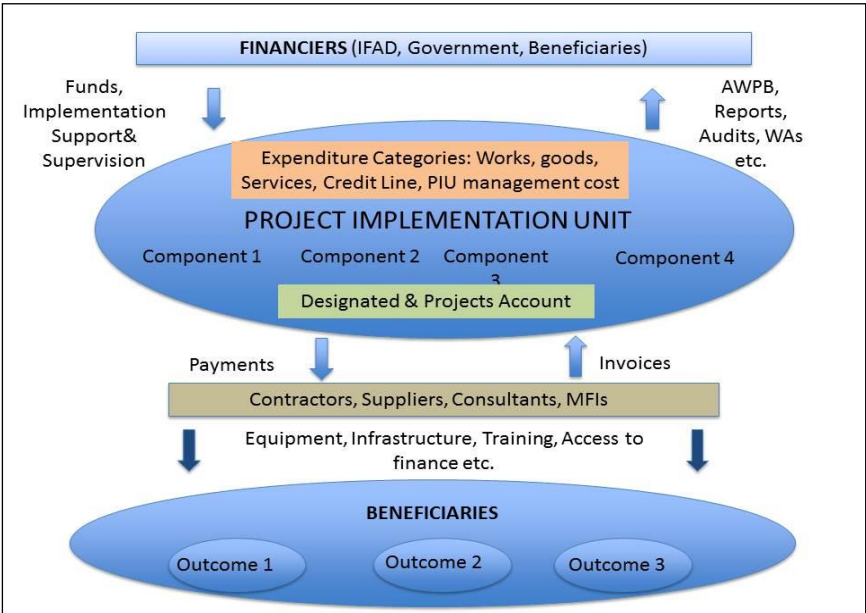
The Finance Officer or a delegated Financial Management Specialist (FMS) will participate in the IFAD Supervision mission at least once a year. Additionally, FO or FMS may participate in implementation support or special purpose missions every year as required and depending on the risk levels and project circumstances.

The missions will define financial management ratings and ensure compliance with the IFAD's requirements. IFAD will also assess and monitor the adequacy of the financial management arrangements such as accounting, budgeting,

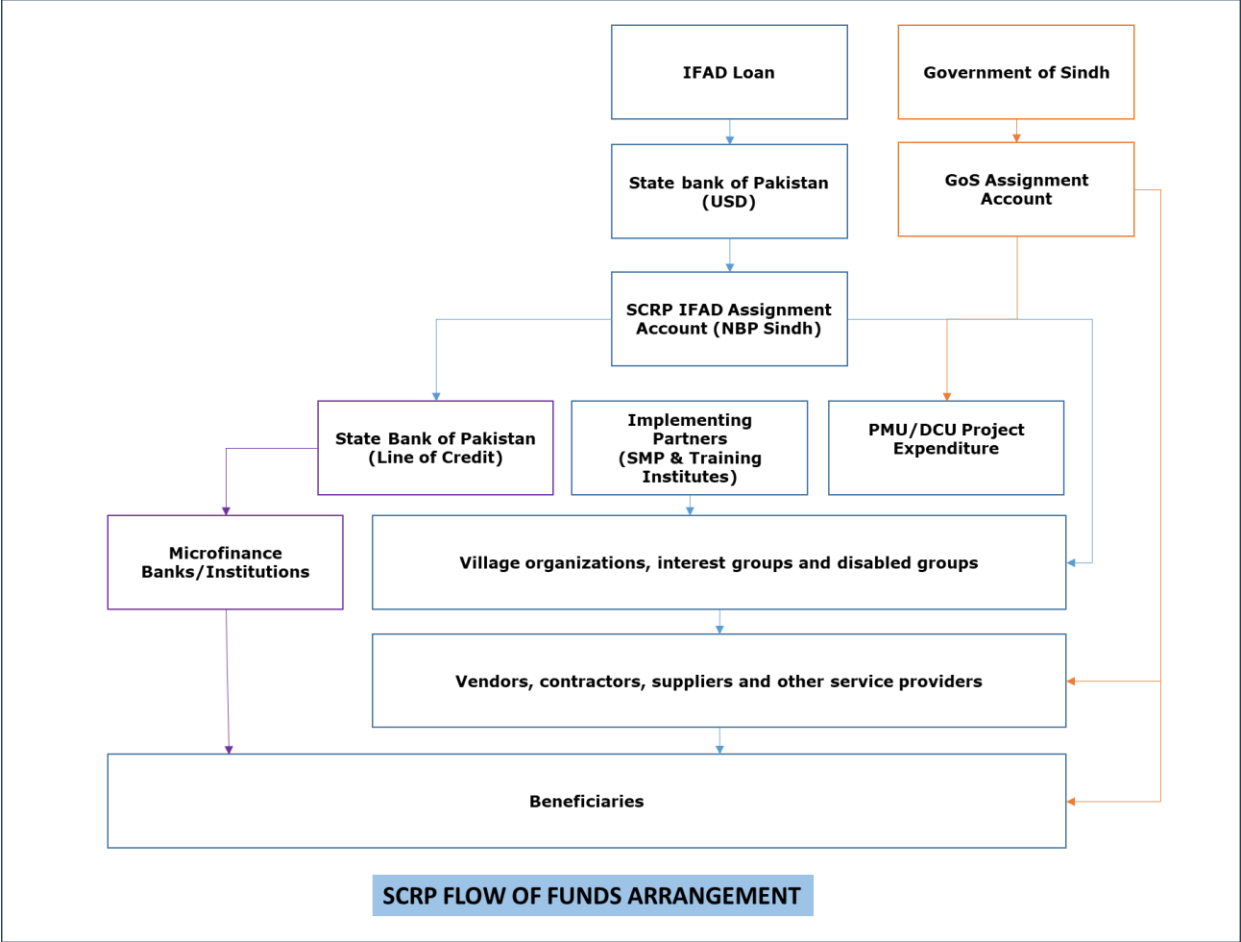
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internal controls, flow of funds, financial reporting, and the auditing practices. The key findings and recommendations of the mission will be captured in the Aide Memoire communicated to the Government and in the published supervision mission reports.

Appendix 1: Flow of Funds Chart



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Appendix 2: FMAQ

FMAQ has been uploaded to FMDB.

Annex to the Project Design Report

The Project Implementation Manual is provided in the PDR with FM inputs.