

China

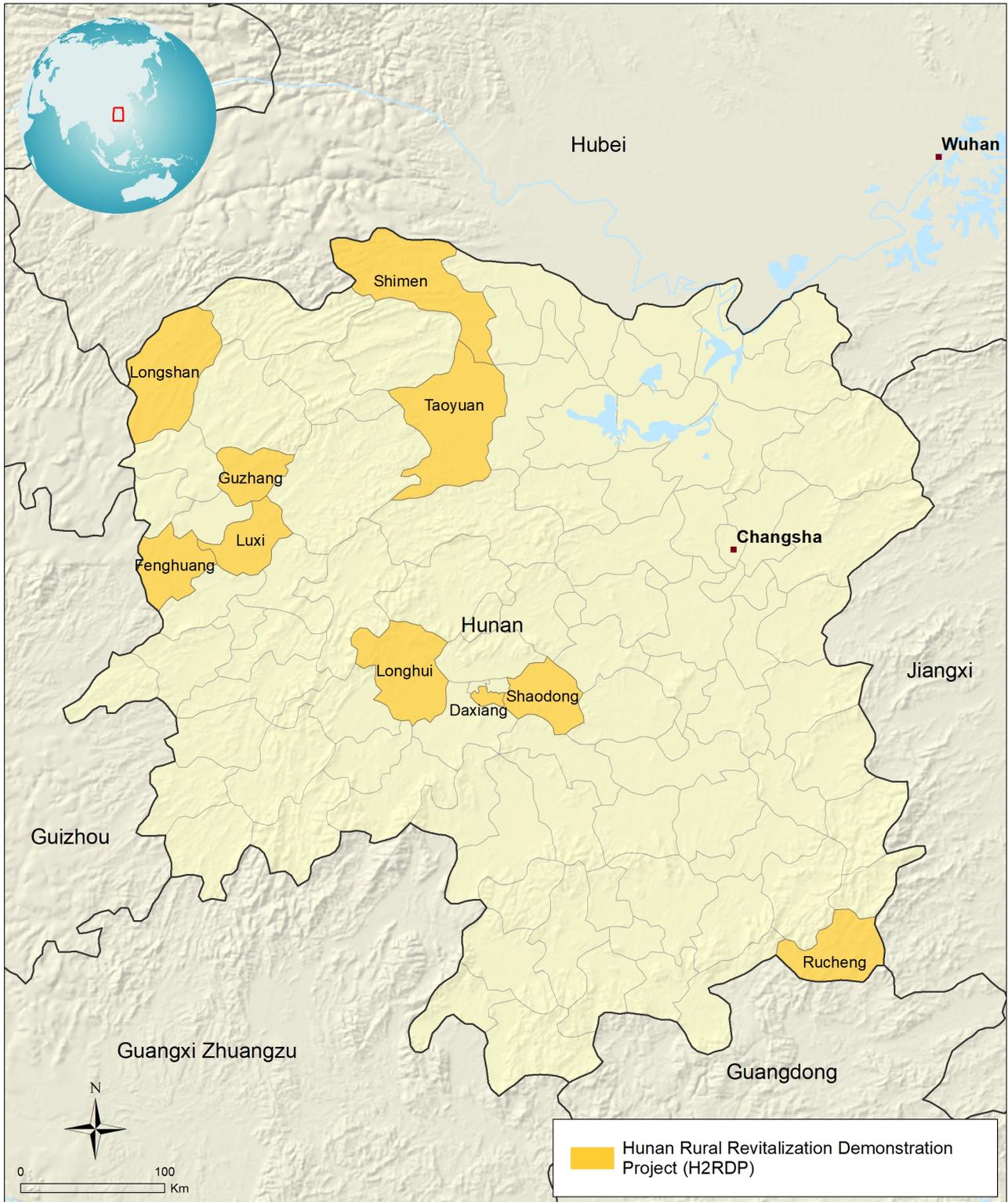
Hunan Rural Revitalization Demonstration Project Project Design Report

Main report and annexes

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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 | 21-01-2020

Abbreviations and Acronyms

ADB	Asian Development Bank
All	Agriculture Information Institute
AWPB	Annual Work Plan and Budget
BOF	County Bureau of Finance
CAAS	Chinese Academy of Agricultural Science
CAFI	China Academy of Financial Inclusion
CARA	County Bureau of Agriculture and Rural Affairs
CAU	China Agricultural University
CIIC	China Internet Information Center
CNY	China Yuan
CO₂	Carbon dioxide
COSOP	Country Strategic Opportunity Programme
CPMO	County Project Management Office
CPRF	Consolidated Poverty Reduction Fund
DA	Designated Account
DARA	Department of Agriculture and Rural Affairs
DLI	Disbursement-linked Indicator
DOF	Provincial Department of Finance
EIRR	Economic Internal Rate of Return
ESMP	Environmental and Social Management Plan
ESSA	Environmental and Social System Assessment
FAO	Food and Agriculture Organization
FIRR	Financial Internal Rate of Return
FSA	Fiduciary System Assessment
GDP	Gross Domestic Product
GPIG	Global Poverty Reduction & Inclusive Growth Portal
KM	Knowledge Management
H2RDP	Hunan Rural Revitalization Demonstration Project
HARIIP	Hunan Agricultural and Rural Infrastructure Improvement Project
IPRCC	International Poverty Reduction Center in China
LDH	Loan Disbursement Handbook
LGOP	Leading Group Office of Poverty Alleviation and Development
LTB	Letter to the Borrower
M&E	Monitoring and Evaluation
MARA	Ministry of Agriculture and Rural Affairs
MIS	Management and Information System
MTR	Mid-term Review
NDRC	National Development and Reform Commission
NEE	New Economic Entity
NPRS	National Poor Registration System

NPV	Net Present Value
O&M	Operation and Maintenance
PBAS	Performance-based Allocation System
PDRC	Provincial Development and Reform Commission
PforR	Program-for-Results
PIM	Project Implementation Manual
PMO	Project Management Office
PoLG	Program of Loans and Grants
PPMO	Provincial Project Management Office
RBL	Result-based Lending
SDG	Sustainable Development Goal
SECAP	Social, Environmental and Climate Assessment Procedures
SSADeP	Shiyuan Smallholder Agribusiness Development Project
SSTC	Souyh-South and Triangular Cooperation
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNSDCF	United Nations Sustainable Development Cooperation Framework
US\$	US Dollar
VA	Verification Agency
VIGs	Village Implementation Groups
WB	World Bank
WFP	World Food Program
WEAI	Women Empowerment in Agriculture Index
WF	Women Federation
Y2RDP	Yunnan Rural Revitalization Demonstration Project
YL	Youth League

In line with IFAD11 mainstreaming commitments, the project has been validated as:

Gender transformational Youth sensitive Nutrition sensitive Climate finance

IFAD Adaptation Finance	\$24,716,000
IFAD Mitigation Finance	\$0
Total IFAD Climate-focused Finance	\$24,716,000

Executive Summary

I. Context

A. National context and rationale for IFAD involvement

a. National context

The poverty context: The Government of the People's Republic of China is planning to eradicate extreme rural poverty, as measured against the prevailing national poverty standards, by 2020. However, sustaining this achievement, reducing inequalities (between coastal and western provinces, urban and rural areas, and among the population), and preventing people who were moved out of poverty from falling back into it will remain government priorities in the years after 2020.

The rural development context. China is undergoing a fundamental transformation in rural areas. Over the past few decades, it has witnessed mass migration of the active workforce from rural to urban areas due to the urban-rural wage gap and limited income-generating opportunities in rural areas. Rural families from poverty-vulnerable households are often dependent on the remittances sent by migrant-worker relatives, supplemented by some income from production and local labour. In response to this situation, the government has recently adopted a rural revitalization strategy—a comprehensive long-term strategy aimed at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive places to live in. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural industrialization (i.e. the development of lead 'industries' through the support of 'new economic entities' (NEEs), i.e. a mix of private sector players which include farmer cooperatives, family farms, and lead agro-enterprises or dragonhead enterprises), creation of employment opportunities, and comprehensive infrastructure development.

Provincial context: Hunan has consistently been a priority area of the Chinese government's poverty reduction program given it hosts a large share of poor people in the country (7.6% of the national poor in 2017). In 2017, 40 out of 122 counties were categorized as nationally-designated poor counties. The average income per capita of the rural poor of Hunan is 30% less than the average income of the province. Although absolute poverty will likely be eradicated by 2020, the risk of transitional poverty and vulnerability will remain high due to limited income opportunities.

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

Gender and youth: Youth migration and the feminization of the workforce are becoming common phenomena in rural China, including in the project area. About 75% of the workforce in the project area is engaged in migrant labour; about 60% of youth are migrant labour. To reverse this trend, a key pillar of the new rural revitalization strategy is the creation of new employment opportunities in rural areas to retain or bring the economically active population, particularly young people, back to rural areas. The project will contribute to empower women in the rural economy and to retain or attract back young people in the rural areas by (i) creating new employment opportunities, with a priority on women, in the project area; (ii) providing business services and stimulating stimulating women entrepreneurship potential and capacities; (iii) enhancing the participation of women farmer in imparting on-farm/off-farm skills training in professional farmer program; and (iv) strengthening the capacity and providing both on-farm and off-farm employment and entrepreneurship opportunities to rural youth, majority of whom will be migratory workers. (Ref. Sub-component A.2 and A.3).

Climate change: The project area is moderately vulnerable to the effects of climate change. The project will contribute to enhance the resilience and reduce the risks and impacts associated to the changing of weather and climate conditions, in particular increase in variability and unpredictability, by strengthening the capacity of the government and beneficiaries to assess climate risks, plan and make decision accordingly, as well as improving the climate-resilience of the infrastructure system. (Ref. Sub-Component B.1 and B.2).

Nutrition: Hunan made significant progress in reducing malnutrition in the rural areas: in 2018, the percentage of stunting, prevalence of underweight, and wasting among children under 5 were less than 1%, about 0.9%, and about 0.07% respectively; the prevalence of anemia and overweight were reported 2% and 0.4% respectively. The data suggests that overall situation in the project area is not alarming. The project will contribute to improved nutrition outcomes by providing awareness on nutritious food and improving access to safe drinking water in the project area (Ref. Activity B.2.1).

COVID-19: In early 2020, China was severely hit by the outbreak of a new coronavirus: COVID-19. More than 80,000 people got infected, and almost 5,000 died. The outbreak had serious socio-economic consequences. China economy shrunk by 6.8% in first quarter of 2020. Socio-economic impact on rural population and vulnerable groups has been severe: poor rural households were less able to reach or afford medical care and had less capacity to cope economically with the consequences of the outbreak. Government successfully implemented several economic and social measures to mitigate the impact of COVID-19, as demonstrated by the positive signals of the economy in the second quarter 2020. However, poor rural households and other vulnerable groups remain vulnerable to the impacts of a new possible shock, risking to fall (or fall back) into poverty. The project will contribute to strengthen the

resilience of vulnerable people in the project area to shocks (including possible new outbreaks) and to reduce their risks to fall or fall back into poverty by creating new income generating opportunities for vulnerable rural people in the project area, and improving the inclusiveness of the benefit-sharing mechanisms from agro-industries. A specific activity will specifically contribute to reduce the risks of zoonotic diseases (e.g. SARS-CoV-2) by providing advisory services related to epidemic prevention and mitigation (Ref. Activity A.2.2).

c. Rationale for IFAD involvement

The development problem: Although absolute poverty is expected to be eradicated in China by 2020, areas that have been classified as "poverty priority areas," including the proposed project area, will remain vulnerable, with limited income-generating opportunities. Traditional small farms cannot be a reliable source of income. As a result, a significant portion of the population is abandoning agriculture. Preventing families who were brought out of poverty prior to 2020 from falling back into it and securing the economic development of these areas to make them attractive places to live in will remain a challenge in the years to come. While the Government's long-term strategy and vision of the rural areas, as laid out in its rural revitalization strategy, builds on supporting private sector development in rural areas through a mix of private sector players called new economic entities (NEEs), there is a risk that the most vulnerable people may be excluded and/or not benefit from the participation in future economic development opportunities. The current situation offers an opportunity to rethink and adjust the current model and introduce and test new models and approaches, focusing on greater inclusiveness for vulnerable households, women and youth.

Rationale for IFAD involvement: While in the past, IFAD was primarily considered a source of concessional financing, in recent years it has increasingly been viewed and appreciated as a development partner whose value added lies in its capacity to introduce and pilot innovative approaches that, if successful, could inform policy-making and be replicated and/or mainstreamed in government programs or shared with other developing countries through South-South cooperation. The current situation offers a unique opportunity for IFAD to support the government in rethinking and improving the current agricultural industrialization model, addressing some of its shortcomings, and adjusting it to a post-2020 scenario, making it fairer, more inclusive, and less of a burden on public finances.

B. Lessons learned

The design of the project benefited from lessons captured in the Evaluation Synthesis Report on Cooperatives of the Country Program Evaluation (2014), and the experience of several IFAD- and World Bank-funded projects, including SSADEP, JIMAAPP, QLMPPR, IPRAD, and SPRAD. These lessons included (i) the shortcomings of pursuing poverty reduction through direct support to dragon head enterprises; (ii) the role that farmers' cooperatives can play in facilitating farmers' access to markets; (iii) the shortcomings of the current lead-household or enterprise-shareholding cooperative model; and (iv) the increasing weight of non-agricultural activities in the rural household's income - among other lessons.

II. Project description

A. Objectives, geographical area of intervention and target groups

Project goal and development objective: The project goal is to maintain poor and vulnerable households out of extreme poverty and increase their production and economic resilience. The project development objective is to improve income-generating opportunities for vulnerable rural people, particularly youth and women, increase the inclusiveness of the benefit-sharing mechanisms from agro-industries/private sector linkages, and increase the resilience of the rural population to climate change impacts.

Project area: The project will be implemented in 10 counties within the four municipalities/prefectures of Chengde, Xiangxi, Shaoyang and Chenzhou in the North-East and Western part of Hunan Province (i.e. Shimen and Taoyunan counties in Chengde prefecture; Guzhang, Fenghuang, Luxi and Longshan counties in Xiangxi Tujia and Miao Autonomous prefecture; Shaodong, Daxiang and Longhui counties in Shaoyang prefecture; and Rucheng county in Chenzhou prefecture). Criteria for the selection of these counties included: currently or previously classified as national or provincial poverty counties, presence of industries (private sector) with a market potential, and commitment of the local government to the objectives and proposed approach of the project.

Targeting strategy: The project will adopt the following targeting strategy:

1. **Geographical targeting:** The project will target current or former nationally- or provincially-designated poor counties, and - within these counties - priority will be given to villages and communities with a higher than county average concentration of registered or formerly registered-poor.
2. **Poverty targeting:** Within the project area, focus will be on vulnerable households (i.e. households who have been registered at least once in the National Poor Registration System since 2014).
3. **Gender, youth and ethnic minorities targeting** Among the project beneficiaries, the specific focus will be on vulnerable groups (i) women; (ii) youth; and (iii) ethnic minorities.

Beneficiaries: In total, the project is expected to directly benefit an estimated 328,000 individuals (or 72,500 households), out of which about 17% are formerly registered poor, 50% women, 30% youth, and 30% belong to ethnic minorities (i.e. direct beneficiaries). The project is expected to indirectly benefit about 413,000 people - or 88,000 households - including indirect beneficiaries. (Average household size is estimated 4.7 people).

B. Components, outcomes and activities

The project will have the following components: (1) Supporting Inclusive Rural Development; (2) Climate-resilient public infrastructure planning and development; and (3) Project management, knowledge management (KM), monitoring and evaluation (M&E), and policy engagement.

1. **Component A: Inclusive Private Sector Investment Models:** This component will create profitable livelihood and diversified income opportunities in the project area by (i) promoting inclusive private sector investment models that will generate new and more diversified income opportunities; (ii) supporting talented young people and women to start their own business; and (iii) providing incentives to the government to increase the scale, the quality and the impact of the new professional farmers training program - a national training program aimed at training farmers to work in a context of agricultural modernization and transition. This component comprises three sub-components:
 1. **Sub-component A.1: Demonstrating inclusive rural business development models:** This sub-component will pilot and demonstrate "inclusive rural business development models" by providing incentives to (i) New Economic Entities that include vulnerable rural households in their business models, and (ii) youth and women entrepreneurs to stimulate their productive and self-development capacity;
 2. **Sub-component A.2: Providing rural business development and livelihood services:** This sub-component will provide services and support to (i) talented young people and women to start their own business; and, (ii) to farmers to improve access to weather and climate forecast information and advice on options to make their farming practices and marketing more resilient to climate change;
 3. **Sub-component A.3: Promoting Gender Sensitive Professional Farmer Training:** This sub-component will provide incentives the county governments to (i) increase the number of farmers participating and getting accredited under the New Professional Farmers Training Program; (ii) attract and increase the proportion of women participating in the Program; and (iii) attract and increase the proportion of younger people participating to the Program. The disbursement will pilot a result-based lending (RBL) approach.
2. **Component B: Climate-proofed public infrastructure planning, development and improvement:** This component will address gaps in the current infrastructure which may limit or constrain the implementation of the project activities. Improvement of the infrastructure system will be achieved through a combination of physical improvements, institutional strengthening and technical assistance, which will also result in a reduction of the risks and the impacts associated to changing weather and climate conditions, and a more sustainable and climate resilient agricultural production. This component is organized along two sub-components:
 1. **Sub-component B.1: Improving infrastructures' climate resilience:** This sub-component will support the development and improvement of climate-resilient infrastructure system in the project area to improve road access, water security, and prevent soil erosion;
 2. **Sub-component B.2: Improving rural infrastructure system:** This sub-component will address some of the major gaps in the current infrastructure system in the project area. All infrastructures supported under this sub-component will be climate-proofed.
3. **Component C: Project Management, Knowledge Management, M&E, and Policy Engagement**

C. Theory of change

Industrialization as key strategy for poverty reduction: Promoting thriving "industries" (i.e. agribusiness development) and linking them with farmers for income generation has been the primary approach in government poverty reduction programs over the past decade. Agricultural "industrialization" remains a central pillar in the new rural revitalization strategy. However, persistent challenges remain in tackling poverty issues, sustaining poverty reduction outcomes and promoting economic development in "deep poverty" areas, such as those targeted by the project. Within this context, the New Professional Farmer Development Program - a comprehensive training program launched by the Ministry of Agriculture to make farmers more capable to work in a context of agricultural modernization and transition - offers a possible entry point to contribute to agricultural modernization and rural revitalization. However, the scale and impact of this program is still limited, mainly because most counties prefer to use their poverty reduction funds for more visible investments than for capacity building.

The current baseline scenario: In the current base scenario, the project area and relatively poor and vulnerable households still face a mixture of constraints: (i) limited income-generating opportunities; (ii) migration of the rural workforce to urban areas and limited household resources for investment in agriculture or other economic activities; (iii) growing feminization of the agricultural workforce; (iv) the limited scale of household landholding; and (v) the inability of smallholders to effectively operate collectively and enter value chains. Furthermore, (vi) increasingly variable rainfall and the frequency of unusual weather events are seen as growing uncertainties for agricultural production in the project area.

The shortcomings of the current approach: While industrialization remains a key strategy for poverty reduction and the revitalization of rural areas, the current approach focused on reaching smallholder households through "dragon head enterprises" has several shortcomings and does not always yield the desired results or guarantee sustainability. There are evident gaps in inclusiveness, fairness and equality, efficiency and sustainability. At the same time, while the industrialization approach envisioned in the new rural revitalization strategy can be a more viable approach for meeting the objectives of poverty reduction and sustaining the results as it expands the support to a larger and more diverse set of private sector operators, questions on the extent by which the new operators would be able to include and benefit the poorer and vulnerable people remain relevant.

Turning challenges into opportunities: The current situation offers an opportunity to introduce and test alternative approaches that could potentially be valuable in informing the government in its pursuit of rural revitalization and sustainable poverty reduction.

The proposed approach: The project would support economic growth, competitiveness and the creation of income-generating and livelihood opportunities in rural areas, and favour the participation of vulnerable people, particularly women and youth, to benefits generated by this process by (i) demonstrating inclusive rural business development models; (ii) stimulating local entrepreneurship

and providing investment support to youth and women entrepreneurs; and (iii) upgrading the skills and capacity of rural people, in particular women and youth, to become business-oriented farmers or entrepreneurs through professional training.

How the approach will be operationalized: This will be achieved through: (i) increasing the capacity of new economic entities as the main entry point to link poor farmers to markets; (ii) stimulating additional and more diversified income opportunities in the project areas by providing services and stimulating local entrepreneurship (especially among women and young farmers/migrant returnees), and attracting new investors in agricultural or non-agricultural activities; (iii) addressing some of the major gaps in the current infrastructure system in the project area (e.g. road access, water scarcity, etc.) which may limit or constrain the implementation of the proposed project activities, while at the same time reducing the risks associated to climate change.

D. Alignment, ownership and partnerships

Alignment with national priorities and strategies: The project is well-aligned with national priorities and strategies, as it will (i) contribute to the government's objective of sustaining poverty reduction achievements after 2020, in keeping with the principles of the rural revitalization strategy; (ii) promote new economic entities, create employment opportunities and develop the infrastructure system in rural areas; (iii) help make the project area economically more attractive, thus retaining migrant workers - particularly youth - and possibly bringing people back to rural areas; and (iv) promote environmental sustainability, in line with the government concepts of "ecological civilization" and "ecologically balanced development."

Alignment with Sustainable Development Goals (SDGs): The objective and activities of the proposed project are aligned with and will contribute to the fulfilment of Agenda 2030, and, more specifically, SDG1, SDG2, SDG5, SDG10, SDG13 and SDG15.

Alignment with COSOP 2016-2020: The project is the fourth investment operation to be designed under the current COSOP 2016-2020, and it well reflects the recent trend of focusing IFAD support on (i) enhancing income opportunities and increasing resilience by promoting and strengthening cooperatives and agribusiness entities, giving more emphasis to improving access to markets and value-chains, and resilience to climate change, and (ii) innovation, knowledge management to inform policy and scaling-up. The project is conceived as a demonstration project that will introduce several innovations to test their applicability in the project context, draw lessons and promote replication of the models and approaches that prove successful.

Alignment with UNDAF 2016-2020 and draft UNSDCF 2021-2025: The project is aligned with and contributes to addressing the priority areas of the UNDAF 2016-2020. It is also aligned with and expected to address the strategic priorities of the draft UNSDCF 2021-2025, expected to be signed in 2020.

Alignment with IFAD' Strategic Framework 2016-2025: The project's objective and activities are aligned with the goal and strategic objectives of the IFAD Strategic Framework 2016-2025, in particular strategic objectives 2 and 3.

Alignment with Transition Framework: The proposed project implements several of the principles and elements of the Transition Framework: it will (i) pilot one of the new products proposed under IFAD11 (i.e. results-based lending, RBL); (ii) help inform policy-making; and (iii) contribute significantly to an increase in cofinancing, particularly domestic cofinancing: the project is expected to mobilize resources in a 1:1.9 ratio.

Alignment with IFAD11 mainstreaming agenda: The project directly supports three of the four IFAD-11 thematic priorities, as it promotes gender empowerment, foster opportunities for the youth, and addresses or reduces the impacts of climate change.

Alignment with Private Sector Engagement Strategy: The project is aligned with and directly contributes to the objectives of the IFAD's Private Sector Engagement Strategy, i.e. mobilize private funding and investments, and expand markets and increase income and job opportunities for IFAD's target groups, as it will use loan resources to attract domestic private sector investments and develop inclusive value-chain to foster proposals from new economic entities, or support entrepreneurs and investors, particularly young and women, to start their business.

E. Costs, benefits and financing

a. Project costs

Project costs: The total project cost is estimated at US\$ 173 million.

b. Project financing/co-financing strategy and plan

Project financing and co-financing: IFAD will contribute to the project with a loan for a total amount of US\$ 60.2 million (35% of the total project cost). The Government will contribute US\$ 90.9 million (53% of the total cost), and participating enterprises and cooperatives, are expected to contribute approximately US\$ 21.4 million (12% of the total cost). The beneficiaries' contribution is expected to be approximately US\$ 0.5 million (less than 1% of the total cost). A partnership with UNWomen to support gender mainstreaming and empowerment is established. UNWomen expected contribution is limited to technical assistance, for an estimated value of about US\$ 0.3 million.

Co-financing ratio: The IFAD loan has a co-financing ratio of approximately 1:1.9. This is about 35% above the IFAD11 target of 1:1.4.

Climate financing: Project sub-components A.1, A.2 and B.1 are counted as climate finance. As per the multilateral development banks' methodologies for tracking climate change adaptation and mitigation finance, the total amount of IFAD climate finance for this project is calculated as US\$ 24.7 million, which represents 41% of the total IFAD project amount.

Disbursement: For the investment components and subcomponents, IFAD loan proceeds will be allocated to the respective expenditure category and disbursed in accordance with the agreed terms and conditions of the Financing Agreement, the Loan Disbursement Handbook and the Letter to the Borrower. These will be supported by appropriate documentation, along with the

withdrawal applications listing the eligible expenditures incurred. For the RBL subcomponent, disbursement will be triggered by the achievement of agreed and independently verifiable targets (i.e. DLIs), as confirmed by an independent third-party verification agency.

c. Summary of benefits and economic analysis

Results of financial analysis: The results of the financial analysis show an estimated net present value (NPV) equivalent to CNY 6,012 million, an estimated financial internal rate of return (FIRR) equivalent to 55%.

Results of economic analysis: The results of the economic analysis suggest that the project is economically viable, with an economic internal rate of return (EIRR) of 43%, with a net present value (NPV) equivalent to CNY 4,566 million and a benefit-cost ratio of 1.87 (Ref. Annex 4 - Economic and Financial Analysis).

d. Exit strategy and sustainability

Sustainability: The project has a number of elements that are likely to ensure post-project sustainability of the activities supported and benefits generated: (i) economic viability; (ii) alignment with national policies, strategies and priorities; (iii) institutional sustainability and sustainable partnerships; (iv) beneficiary ownership and empowerment; (v) financial viability; (vi) a shift from subsidizing production toward responding to market demand; (vii) operation and maintenance arrangements.

III. Risks

A. Risks and mitigation measures

Project risks: In general, most of the identified risks have low probability and low impact, except for risks inherent to institutional capacity, which are rated medium, and environmental and social risks, which are rated moderate.

B. Environment and social category

Environment and social category: The project is classified as Category B. The potential adverse environmental and social risks are minor, site-specific, reversible and can be managed by known mitigation measures as highlighted in the SECAP Review Note. The project will not involve any large infrastructure schemes, land acquisitions, resettlements, or conversion of forest or other natural or modified habitats. It will not involve any involuntary taking or restriction on the use of land that may result in physical or economic displacement and will not damage or destroy any physical resources of historic, religious or cultural significance.

C. Climate risk classification

Climate risk classification: The potential climate risk of this project is classified as "moderate." The project will finance a series of hard and soft investments aimed at reducing the risks and negative impacts associated with changes in weather and climate conditions and promote climate-resilient production.

IV. Implementation

A. Organizational framework

a. Project management and coordination

Lead implementing Agency: The Provincial Department of Agriculture and Rural Affairs (DARA) has been appointed as lead implementing agency. Specifically, the Hunan Agricultural Foreign Economic Cooperation Center within DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO).

Prefecture and County Project Management Offices: The major implementation responsibilities of the project lie with the counties. County Project Management Offices will be established at the County Bureau of Agriculture and Rural Affairs. Relevant technical bureaus in the counties will be mobilized to support implementation of the related project activities.

Department/Bureaus of Finance: The Department/Bureau of Finance at Provincial/County level and at Xiangxi Prefecture and Shaoyang City will be responsible for administering programme resources, including the IFAD loan and counterpart funds.

Provincial Coordination Committee: A coordinating committee comprising at least the Provincial Department of Finance (DOF), the Provincial Department of Agriculture and Rural Affairs (DARA), the Provincial Development and Reform Commission (PDRC), and the Provincial Office of Poverty Alleviation is foreseen to provide overall guidance and coordination of the project implementation.

Project Leading Group: At county level, a Project Leading Group will be established to be chaired by the executive county governor, comprising at least the County Bureaus of Finance (BOF), Agriculture and Rural Affairs (CARA), and Poverty Alleviation Office, Women Federation etc. The Project Leading Group will provide overall guidance and coordination of the project implementation.

Partnership with Women Federation and Youth Leagues: The Women Federation (WF) and Youth League (YL) in the counties will be also be assigned responsibilities in undertaking women and youth related activities designed for the project. The Chairperson of county Women Federation will be assigned the role of deputy project director at the county CPMO, with a specific role in overseeing the gender related aspects and activities of the project, and facilitating gender transformation in the project context.

Partnerships with UNWomen: A partnership with UNWomen is established to support project design and implementation. Specifically, UN Women will contribute to promote women capacity and economic empowerment in the project area.

Role of the Agricultural Information Institute of the Chinese Academy of Agricultural ScienceThe project would enter into an

agreement with the Agricultural Information Institute of the Chinese Academy of Agricultural Science to perform major M&E, knowledge management and policy dialogue functions (i.e. conducting baseline, midline, and endline surveys; data analysis; impact assessments; policy notes, etc.).

Implementation of a result-based lending approach: The project will be implemented piloting a result-based lending (RBL), as the disbursement of Sub-component A.3 will be triggered by the achievement of agreed and independently verifiable targets. The RBL sub-component will build on the use of government systems.

Exceptions to the General Conditions: The following exceptions to the General Conditions will be adopted to implement subcomponent A.3 (*Promoting Gender Sensitive Professional Farmer Training*) – the subcomponent which will pilot a results-based lending approach: (a) Disbursement will be triggered by the achievement of agreed and independently verifiable targets; and (b) IFAD will not maintain the right to directly investigate allegations of fraud and corruption in the subcomponent. The Government however has the obligation to inform IFAD of alleged cases of fraud or corruption, and to inform IFAD on the results of the investigation.

B. Planning, monitoring and evaluation, learning, knowledge management and communications

Learning, knowledge management and South-South cooperation: The project knowledge management strategy would be built on the following key elements: (i) The establishment of an effective M&E framework to monitor implementation progress and provide the evidence for learning; (ii) Regular workshops at different levels to share knowledge, experiences, innovations and best practices and promote South-South cooperation; (iii) The promotion of study tours, exposure and exchange visits, both inside and outside the country, as a vehicle for knowledge sharing and South-South cooperation; (iv) An agreement with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) will be signed for the provision of support in M&E, and knowledge management.

Innovations: Anticipated innovations include: (i) *Inclusive rural business development models:* The project will provide investment support for rural businesses, which demonstrate viable and inclusive business models featured by genuine vulnerable households' participation and fair benefit sharing arrangements. Professional farmer cooperatives would be the primary focus, but other new economic entities will also be targeted by the project; (ii) *Business incubation centers:* The project will support the setting-up and operationalization of business incubation centers, platforms to support entrepreneurship programs and business start-up; (iii) *Climate proofed design of infrastructure:* The project will support the improvement of the capacity to assess climate-risks, and plan and make investment decisions accordingly, and the integration of climate considerations into the design and technical specification of the infrastructures, to reduce their vulnerability to the anticipated impacts of climate change; (iv) *Disbursement against results:* The project will introduce on a pilot basis an innovative mechanism for disbursement, i.e. disbursing project funds allocated for a sub-set of activities against the achievement of agreed and independently verifiable targets or milestones that are important to achieving the project objectives. The achievements of the agreed targets or milestones, or disbursement linked indicators (DLIs), will be verified by an assigned independent agency following agreed verification protocols.

Policy engagement and scaling-up: The policy engagement and scaling-up framework relies on the following elements: (i) *Champions:* The project will closely engage national and provincial stakeholders as champions to learn and replicate ideas and experiences derived from the project; (ii) *Drivers:* There is a mix of (i) market forces associated with the growing demand for safe, high-quality food; and (ii) genuine policy interest on the part of the government, particularly the Ministry of Agriculture and Rural Affairs, in observing how some of its policies and strategies can best be operationalized or adjusted; (iii) *Pathway:* The pathway for policy engagement and scaling-up would include the following steps: (a) regular monitoring of project progress and results, which will yield evidence for learning; (b) learning and stocktaking of lessons and best practices, including through possible analytical works, etc.; (c) regular workshops, seminars and other learning events at different levels to share knowledge, experiences, innovations and best practices and inform policymakers; (iv) *IFAD's role:* IFAD will provide the necessary expertise, contributing to the monitoring of results and to knowledge management that will serve as a catalyst for the scaling-up process.

C. Implementation plans

a. Implementation readiness and start-up plans

Implementation readiness: Hunan has extensive experience in implementing foreign-funded projects, including IFAD-funded projects (the last one, HARIIP, was completed in 2017). To further mitigate the risks of start-up delays, provision is made for retroactive financing to the project to finance start-up activities and facilitate prompt project execution.

b. Supervision, midterm review and completion plans

Supervision, mid-term review and completion plans: IFAD and the Government will undertake project supervision activities that include at least one annual supervision, a mid-term review and a completion review.

1. Context

A. National context and rationale for IFAD involvement

a. National Context

1. **China's economic progress:** Since the opening-up of economic reforms in 1978, China has experienced unprecedented economic growth, averaging 9% annual GDP growth per year over the past 40 years. This makes China the second largest economy in the world. China's share in the world economy rose from 1.5% in 1978 to 15% today, and per capita income increased 32-fold, from US\$ 300 dollars in 1978 to US\$ 10,100 in 2019.
2. **The poverty context:** Continued high economic growth paid great dividends to well-being of Chinese people. Poverty fell from 88% in 1981 to 3.8% in 2017 (as measured equivalent of US\$ 1.9/day). Government of China is all set to eradicate absolute rural poverty by 2020 - making China the first developing country to achieve the SDG1 target, ten years ahead of the global target. However, challenges remain high in avoiding transitional poverty (i.e. falling back into poverty), reducing inequality (regional disparities between rural and urban areas, between coastal and western provinces [1], and among the population) [2]. These will remain prime priorities for government beyond 2020.
3. **The rural development context and the rural-urban gap:** Nearly 600 million Chinese, about 40% of the population, live in rural communities. China has witnessed a fundamental transformation in rural areas: whilst rural poverty has been eliminated, rural areas have experienced massive urban migration of the active workforce due to the large gap between the urban and rural salaries (per capita disposable income for the urban population is almost three-times higher than the rural population) and the limited income-generating opportunities in the rural areas. Rural villages today are characterized by a population which mainly comprises elderly, some middle generation women taking care of the elderly parents (the so-called "left-behind women", who represent about 60% of the labour force in rural areas), young children, and sick and/or people with disabilities. Rural families from poverty vulnerable households are often dependent on the remittances provided by migrant worker family members, complemented by some income from small-scale production and local labour. The contribution of agriculture to the rural household income is reducing (an estimated 10-20% in poor rural areas, less than 10% nationally), and income-generating opportunities are in "adding-value", not in production. Today, about 40% of the population is registered in rural areas. This percentage is expected to drop to 31% by 2030, furthering the urban-rural divide, unless measures are taken to economically develop the rural areas.
4. **The government's "Rural Revitalization Strategy":** In response to this trend, the government of China has recently articulated a "rural revitalization" strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead 'industries' through the support of 'new economic entities' (NEEs), i.e. a mix of private sector players which include farmer cooperatives, family farms, and lead agro-enterprises or dragonhead enterprises), creation of employment opportunities, and comprehensive infrastructure development - among other strategies. The project support the overall vision of rural revitalization strategy with a lead role of NEEs as project partners and serve as entry point to rural inclusiveness and participation.
5. **Provincial context:** Hunan has consistently been a priority area of the Chinese government's poverty reduction program given it hosts a large share of poor people in the country (7.6% of the national poor in 2017). In 2017, 40 out of 122 counties were categorized as nationally-designated poor counties. The average income per capita of the rural poor of Hunan is 30% less than the average income of the province. Though absolute poverty will likely be eradicated by 2020, the risk of transitional poverty and vulnerability will remain high due to limited income opportunities.

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

6. **Gender:** Feminization of rural population and of the work force are becoming common phenomenon in rural China. Due to mass migration of male workers to urban and eastern centers, women contribute 81% of the rural labour force, compare to 58 % for men. The majority are engaged in agriculture. However, women have usually less control over inputs and rural credit. Moreover, the share of women in post-production business activities is almost negligible. The situation in the project counties does not differ much from the national context: 75% of the workforce in the agriculture is represented by women. Despite the fact women are the main source of rural labour force, their representation in leading cooperatives is below 9%, while percentage of women led enterprises is only 9%, and women led family farming is about 37%. The project will contribute to empower women in the rural economy by (i) creating new employment opportunities, with a priority on women, in the project area; (ii) providing business services and stimulating stimulating women entrepreneurship potential and capacities (Ref. Sub-component A.2); and (iii) enhancing the participation of women farmer in imparting on-farm/off-farm skills training in professional farmer program (Ref. Sub-component A.3).
7. **Youth [3]:** Overall in China the youth unemployment has remained under 10% for the last three decades, mainly thanks to the effects of the rural-urban migration, whereas about 250 million youth migrated to urban centers to find employment opportunities. In the project counties, about 60% of youth are migrant labour. There could be potentially some interest in migrant workers in starting or joining economic activities in their own rural villages/towns if they were given the opportunity, as the urban living is expensive and migration has a disruptive social impact on family life. In this regard, a central pillar of the new rural revitalization strategy focuses on creating new employment opportunities in the rural areas to retain or attract back the active population to the rural areas [4], particularly young people. The project will contribute to this objective by strengthening the capacity and providing both on-farm and off-farm employment and entrepreneurship opportunities to rural youth, majority of whom will be migratory

workers (Ref. Sub-component A.2 and A.3).

8. **Climate change:** China has witnessed an average atmospheric temperature increase by 0.91 degree Celsius in the past 100 years. With the continued intensification of climate change, the occurrence of extreme weather events and natural disasters will continue to increase as per historical data. As poverty areas often coincide with climate and ecologically vulnerable areas, the effects of climate change will have a higher impact on rural, marginalized and natural resource-dependent households, who have higher exposure and lower adaptive capacity - increasing their overall vulnerability. The climate conditions in the ten project counties are suitable to agricultural production. The degree of climate risk in the project areas is considered not high, and vulnerability to the effects of climate change is considered moderate. However, considering the different agriculture industry characteristics in each county, some commodities may need more attention for climate adaptation compared to others. Specifically, (i) Annual precipitations: The average annual precipitation in the project area ranges from 1200 mm to 1,500 mm. The rainfall mainly occurred from April to August, which accounted for 63% of total precipitation of the whole year. Rainfall in spring and summer occupied 36% and 35% of the annual precipitation while 17% and 12% in autumn and winter. Due to uneven rainfall distribution within the year and between years, seasonal water shortage and droughts are a common phenomenon. Shaodong county, Longhui county and Daxiang county, which are located in the drought corridor of Heng-Shao, are more seriously short of water. (ii) Mean temperatures: According to the meteorological monitoring data from the past 50 years (1960 to 2010), mean temperature in Hunan province increased at a rate of 0.153°C per 10 year. The future projections forecast that mean temperatures in the project area would further increase, and seasonal precipitation variation would also increase, with a decrease in precipitations in spring and autumn, and an increase in summer. Some areas would likely experience longer dry period, more rainy days in wet season, as well as increased number of frozen days during winter. (iii) Expected variation of frequency of extreme weather events: The increased frequency and intensified extreme weather events would likely cause more seasonal droughts and floods, with an impact on soil erosion. It is observed that small scale agrometeorological disasters are common across the region, while serious disasters rarely occur. Aside from that, most of the negative impacts from such events are minimized or mitigated through preventive measures, and the community also has strong resilience capacity post disasters. The project will contribute to enhance the resilience and reduce the risks and impacts associated to the changing of weather and climate conditions, in particular increase in variability and unpredictability, by strengthening the capacity of the government and beneficiaries to assess climate risks, plan and make decision accordingly, as well as improving the climate-resilience of the infrastructure system. (Ref. Sub-Component B.1 and B.2).
9. **Nutrition:** China has made significant progress in improving the food security and nutritional status of its people. Prevalence of undernourishment decreased from 24% in 1992 to 9% in 2016. Malnutrition prevalence in children under 5 years decreased from 38% to 9% (measured as height for age) and from 19% to 3% (weight for age) in the period 1987-2010. Stunting, underweight, and wasting among children under 5 years were 8%, 2% and 2% respectively in 2013. China's value in the Global Hunger Index fell from 25.1 in 1990 (serious hunger level), to 7.6 in 2018 (low hunger level). Government is also promoting, under National Nutrition Plan (2017-18), breastfeeding rate for infants under six which was historically very low i.e. 21% in 2013. Similarly, Hunan made significant progress in reducing malnutrition in the rural areas: the percentage of stunting, prevalence of underweight, and wasting among children under 5 were less than 1%, about 0.9%, and about 0.07% respectively in 2018; the prevalence of anemia and overweight were reported 2% and 0.4% respectively. The data suggests that overall situation in the project area is not alarming. The project will contribute to improved nutrition outcomes by providing awareness on nutritious food and improving access to safe drinking water in the project area (Ref. Activity B.2.1).
10. **COVID-19:** In early 2020, China was severely hit by the outbreak of a new coronavirus: COVID-19. More than 80,000 people got infected, and almost 5,000 died. The outbreak had serious socio-economic consequences. China economy shrunk by 6.8% in first quarter of 2020. Some 460,000 Chinese firms and 12,000 existing foreign trade enterprises closed down during that period. Socio-economic impact on rural population and vulnerable groups has been severe: poor rural households were less able to reach or afford medical care and had less capacity to cope economically with the consequences of the outbreak. Lockdown and movement restrictions had a significant impact on rural employment, particularly from migrant work: it was estimated that as many as 200 million rural individuals may have been out of work during the country's two-month lockdown period. Similarly, lockdown and movement restrictions had an impact on the production and sales of agricultural products, delaying the delivery of agricultural inputs and affecting farmers' ability to access markets, affecting many small businesses in rural areas. Government successfully implemented several economic and social measures to mitigate the impact of COVID-19, as demonstrated by the positive signals of the economy in the second quarter 2020. However, poor rural households and other vulnerable groups remain vulnerable to the impacts of a new possible shock, risking to fall (or fall back) into poverty. By creating new income generating opportunities for vulnerable rural people in the project area, improving the inclusiveness of the benefit-sharing mechanisms from agro-industries, and increasing their resilience to the impacts of climate change, this project will contribute to strengthen the resilience of vulnerable people in the project area to shocks (including possible new outbreaks) and to reduce their risks to fall or fall back into poverty. In addition, the project will also specifically contribute to reduce the risks of zoonotic diseases (e.g. SARS-CoV-2) by providing advisory services related to epidemic prevention and mitigation (Ref. Activity A.2.2).

c. Rationale for IFAD involvement

11. **The development problem:** Although China is set to eradicate absolute poverty by 2020, the areas that were previously classified as "poverty priority areas", including the proposed project area, will remain vulnerable and with limited income-generating opportunities. These areas are characterized by strong rural-urban migration, particularly among the youth, ageing population, and feminization of the workforce. Traditional farms are too small to provide a reliable source of income, or require too much labour to remain an attractive livelihood opportunity, also considering the remittances the family receives. As a matter of fact, income from agriculture represents only a relatively small percentage of the household income. As a result, a significant part of the population has moved out of agriculture - and, in the most part, migrated to urban areas. Preventing those families that were brought out of poverty prior to 2020 falling back into poverty, and securing economic development of rural areas will remain a challenge in the years after 2020. Further, the Government's conventional agricultural development strategies have mainly focused on production/productivity enhancement, with emphasis on infrastructure development rather than on post-production, value addition and marketing, which did not necessarily take advantage of the emerging market opportunities, and in some cases

resulted in cases of local overproduction which led in drops in the price of commodities and farmers' income. Though Government's long-term strategy and vision of the rural areas, as laid out in its Rural Revitalization strategy, builds on supporting private sector development in rural areas through a mix of private sector players called New Economic Entities (NEEs), there is a risk that the most vulnerable people may be excluded and/or not benefit from the participation in future economic development opportunities. Such risk offers an opportunity to fine-tune this model, making it more inclusive, i.e. ensuring that vulnerable households, women and youth are included and benefit from the economic opportunities generated in rural areas.

12. Rationale for IFAD involvement:

1. **How the proposed intervention fits in the context of the evolving IFAD-China partnership - IFAD's added value:** While in the past IFAD was primarily considered as a source of concessional financing, in recent years IFAD has been increasingly viewed and appreciated as a development partner, whose "added value" lies in its capacity (through its loans) to introduce, test and pilot innovative approaches that, if successful, could inform policymaking and be replicated and/or mainstreamed in government programs - or shared to other developing countries through south-south cooperation. This represents the foundations of the current COSOP (2016-2020), which provides the framework for the design of this project. Although the next COSOP (2021-2025), which will provide the framework for the implementation of the project, has not yet been developed, it is expected that the expectations about the role and added value of IFAD in China in the near future would broadly remain the same. The current situation offers a unique opportunity for IFAD to support the government strategy of rural revitalization, focusing in particular on ensuring that the promoted economic models are inclusive.
2. **IFAD's "niche" in China - the rationale for working in poor areas and focusing on inclusiveness:** Since 1981, when the first IFAD loan to China was approved, IFAD has supported the government in pursuing its poverty reduction agenda, working in the most marginal and vulnerable areas of the country. In recent years (Ref. COSOP 2016-2020), IFAD has thematically focused on improving access of smallholders to markets by promoting inclusive value-chain and cooperative development, and on increasing the resilience of rural populations to climate change. IFAD has thus the credibility and the experience to support the government in improving its poverty reduction through agribusiness development models. The project will demonstrate, on a pilot basis, that the new rural development business investment model promoted by the rural revitalization strategy can be inclusive and benefit rural vulnerable groups. This will be achieved by strengthening the role and capacity of the New Economic Entities, with particular attention to professional farmer cooperatives, to act as a vehicle/entry point for pursuing inclusiveness through agribusiness development. The project will promote the adoption of a 'market driven' approach (i.e. it will support business entities to identify and respond to markets' demands).
3. **How the project would inform policymaking and support replication:** The project is conceived as a "demonstration" project, which will introduce several innovative approaches to test their applicability in the project area's context, learn lessons, and support replication successful models and approaches and/or inform policy-making. The potential of this project to become a vehicle for policy engagement and scaling-up is based on the genuine interest from the central level agencies, particularly from the Ministry of Agriculture and Rural Affairs (MARA), in observing how some of its policies and strategies can be best operationalized or adjusted. The provincial Department of Agriculture and Rural Affairs (DARA), the lead implementing agency, will play a critical role as entry point to inform MARA. Key elements for pursuing policy engagement and scaling-up include: (i) regular monitoring of project progress and documentation of results, which will provide evidence for learning; (ii) stocktaking and analysis of lessons and best practices, including through possible research/analytical works, impact assessments, etc.; (iii) regular workshops, seminars and other learning events to share knowledge, experiences, innovations, and best practices and inform policy-makers; (iv) joint field-visits with relevant stakeholders and policy-makers to showcase lessons and best practices; (v) regular interaction with other projects to share lessons and best practices. A budget for policy activities under Component C is included to favour and provide sufficient resources to implement activities aimed to this purpose. Within this context, it is strategic the partnership that the project will aim to pursue with the Agriculture Information Institute of the Chinese Academy of Agricultural Science (AII-CAAS) to receive support in monitoring and evaluation, extracting relevant knowledge from the project, and utilizing it to inform policy making.
4. **Complementarity with other lending and non-lending instruments:** According to the COSOP 2016-2020, the implementation of the IFAD country program in China will be pursued through three complementary instruments/delivery mechanisms: investment loans, non-lending activities (which would include analytical works, technical assistance, impact assessments, policy engagement, south-south cooperation), and partnerships. The three instruments/delivery mechanisms are jointly expected to contribute to the COSOP' strategic objectives: increase smallholder capacity and opportunities to access markets, and strengthen environmental sustainability and climate resilience. This project should be seen as synergetic and complementary to the other ongoing and planned activities: it will further pilot and test different approaches of poverty reduction through agribusiness development, which represented the thematic focus of the last six IFAD-funded projects (in seven different provinces) in China (including the Yunnan Rural Revitalization Demonstration Project, approved in April 2020), offering additional insights on the factors and conditions that make different 'poverty reduction through agribusiness development' models more or less successful. In addition, the project well complements the analytical works on value chain development and poverty reduction carried out by the China Agricultural University (CAU) and the China Academy of Agricultural Sciences (CAAS) under the recently completed country grant "Enhancing Knowledge Management & Cooperation and Policy Dialogue" (Value chain models for poverty reduction, and E-commerce for value-chain development in poverty areas), and the planned analytical work on digital finance for smallholders carried out in partnership with the China Academy of Financial Inclusion (CAFI). If successful, the approaches piloted under the project can be documented and shared with other developing countries through the Global Poverty Reduction & Inclusive Growth Portal (GPIG), a digital platform hosted by the International Poverty Reduction Center in China (IPRCC) and the China Internet Information Center (CIIC) aimed at favouring south-south knowledge cooperation on poverty reduction and inclusive growth - as in the case of the "pro-poor private-public partnership" model piloted under the IFAD-funded SSADeP.
5. **Synergies and complementarity with Y2RDP:** This project is synergetic and complementary to the first project designed under the 2019-2021 PBAS cycle - the Yunnan Rural Revitalization Demonstration Project (Y2RDP), approved in April 2020 -

as it will pilot a slightly different approach to poverty reduction through agribusiness development, inclusive rural development (i.e. ensuring that vulnerable households, women and youth are included and benefit from the economic opportunities generated in rural areas), and overall support to the government's rural revitalization agenda in a different province - with the overall objective of contributing to learn about the conditions that make the different models more or less successful, and compare the strengths/weaknesses of the different models. Particularly, differences between the baseline conditions in the project area in Yunnan and the project area in Hunan concern the presence of a more developed and varied mix of private sector players, which made the Project Design Team opt for an approach that included all New Economic Entities (rather than primarily focus on cooperatives, as in the case of Yunnan); a greater awareness and interest for gender empowerment, which made the design of this project more ambitious in terms of gender transformational objectives; and the concurrent design of a World Bank's Program-for-Results (PforR) project in Hunan, which made the provincial government more aware and familiar with the proposed result-based lending approach for this project.

B. Lessons learned

Lesson	How the lesson has been incorporated in the design
<ul style="list-style-type: none"> Poverty reduction through direct support to dragonhead enterprises evidenced shortcomings: Most of government's past efforts to reduce poverty through 'industrialization' (i.e. the development of lead 'industries' through the support of agribusiness entities) focused on directly supporting (through incentives, subsidies, preferential access to finance, etc.) local 'dragonhead' enterprises, under the assumption that the economic benefits generated by the enhanced industries would trickle down to the surrounding population, including the poor. However such approach demonstrated some limitations, as: (i) highly dependent on government subsidies, which are likely to decrease after 2020, when poverty will be eradicated, and thus not sustainable in the long run; (ii) not necessarily inclusive, as limited attention in the model was paid to targeting and the benefit sharing mechanisms (in most cases, land leasing and dividends were the preferred benefit sharing mechanisms); and (iii) expensive: because limited attention was paid on targeting and benefit sharing mechanisms, most of the resources were captured by the enterprise and only limitedly reached the target population, making the investment/benefit ratio extremely high. 	<ul style="list-style-type: none"> The project aims at improving the government's currently predominant 'poverty reduction through industrialization' model by: <ul style="list-style-type: none"> (i) Expanding the range of primary beneficiary of public support, from mainly dragonhead enterprises, to a wider range of private sector players (i.e. 'new economic entities', which comprise farmer cooperatives, big household farmers, family farms - in addition to dragonhead enterprises). The project will primarily focus on farmer cooperatives (Ref. Activity A.1.1), but other business entities (e.g. household entrepreneurs, family farms, or lead enterprises) will be also supported (Ref. Activity A.1.2); (ii) Promoting benefit sharing mechanisms that allow active participation of the target group in the economic success of the new economic entity (i.e. income from production, wage labour, or dividends as active member in a cooperative. Using land as a share will be given preference over leasing the land for an annual or one-time payment).
<ul style="list-style-type: none"> Farmers cooperatives are an important force to facilitate farmers' access to market: The Evaluation Synthesis Report on Cooperatives of the Country Program Evaluation (2014) highlighted that farmers' cooperatives are an inevitable outcome of China's recent rural economic development, and an important force to link farmers to markets, as they contribute to: (i) provide funding support for the poor farmers; (ii) reduce production and transactions costs; (iii) generate economies of scale effect(s); and (iv) improve the comprehensive quality of farmers. 	<ul style="list-style-type: none"> The project will primarily focus on cooperatives as the main entry point for investment (although other business entities, i.e. new economic entities, will be eligible for support). In order to maximize the benefits for the project target group, some of the criteria for farmer cooperatives to be supported by the project include: (i) a critical balance between business strength (generally from non-poor members) and appropriate inclusiveness of vulnerable and poor households; (ii) transparency in business decisions and financial accounts to reduce elite capture and social disruptions; (iii) the application of fair benefit-sharing arrangements, which allow participation of the cooperative members in the business success of the cooperative, and stimulate individual engagement in the cooperative's economic activity; and (iv) shareholding structures and mechanisms which provide sufficient attractiveness for the necessary financial capital or land asset contribution.

<ul style="list-style-type: none"> ● The shortcomings of the cooperative development in China: Over the past ten years, the number of farmer cooperatives in China has rapidly increased. However, the overall cooperative development in China presents some major shortcomings: <ul style="list-style-type: none"> (i) In many cases cooperatives are established (and controlled) by enterprises and/or large farmers, rather than by the spontaneous coordination of small farmers dealing with the same problems. As a result, small farmers have little participation and control in the cooperatives; (ii) In other cases, cooperatives are created 'top-down', headed by village leaders, with every household considered as a member (i.e. the so-called 'village cooperatives'). However, such village cooperatives lack the features of self-elected governing and decision-making business entities, and lack financial independence and transparency. 	<ul style="list-style-type: none"> ● Strengthening the role and capacity of farmer cooperatives is critical to achieve the objectives of poverty reduction through industrialization, and for sustaining the results. The success of farmer cooperatives in generating the economic benefits for their members in general, and for their poor members in particular, depend on their ability to meet operational standards (in terms of membership, financial management capacity, transparency, governance and decision making processes, etc.) and poverty alleviation commitments (in terms of inclusiveness of poor households, and fair shareholding and benefit sharing mechanisms). ● The project will work with and support cooperatives that are interested to reach operational standards and benefit sharing mechanisms which would qualify them as 'pro-poor standard cooperatives', i.e. cooperatives committed to poverty alleviation in terms of inclusiveness of poor households among their members, and fair shareholding and benefit sharing mechanisms. ● The project will not support either the cooperatives controlled by an enterprise and/or large investor, or the village cooperatives, as they are not likely effective to create ownership, empowerment and self-development of the project target group.
<ul style="list-style-type: none"> ● Limited attention to post-production, value-addition and marketing: Government's conventional agricultural development strategies have mainly focused on production/productivity enhancement, with emphasis on infrastructure development rather than on post-production, value-addition and marketing, which did not necessarily take advantage of the emerging market opportunities, and in some cases resulted in cases of local overproduction which led in drops in the price of commodities and farmers' income. <p>As observed in the Evaluation Synthesis Report on Cooperatives of the Country Program Evaluation (2014), some of the shortcomings observed in the past programs that include a value-chain development module is that the module is not complete as the government mainly provides support for expansion of production, and is lacking a market operation mechanism. Selling of the products is often only considered a next step deferred after the project.</p> 	<ul style="list-style-type: none"> ● The project will promote the adoption of a 'market-driven' approach (i.e. it will support cooperatives to identify and respond to markets' demands). While not excluding support to increasing/expanding production base, preference would be given to proposals that promote 'value-addition' (i.e. processing, product differentiation and certification, traceability, branding, marketing, etc.), as value-addition is expected to generate higher profits, and shortening of the value-chain (i.e. linking cooperatives to end-consumers, using e-commerce and direct sales arrangements with supermarkets, etc.). ● The project will take several measures to promote a 'market-driven' approach: (i) the project moves away from a government designed investment package for farmer cooperatives to a demand-driven support of business opportunities identified in business plan proposals. To be financed, each business plan needs to demonstrate market demand and a market operation mechanism with satisfactory financial viability criteria; (ii) cooperatives need to attract a private co-investor matching the project investment at least on a 1:1 basis. The private investor will introduce management and business expertise and understanding: through such risk sharing it will contribute to market and business orientation; and (iii) investments in production will follow a 'contract farming approach' and will be based on joint business plan prepared by a market partner (enterprise) and a farmer cooperative.
<ul style="list-style-type: none"> ● The increasing weight of non-agricultural activities in the rural household's income: Greater emphasis in previous projects has been placed on making agriculture activities more profitable for poor smallholders, with the objective of increasing their income. However, evidence shows that, following the fundamental transformation that rural China is experiencing, income from agricultural activities represents today - on average - a relatively small percentage of the overall income of a rural household. 	<ul style="list-style-type: none"> ● The project would combine activities aimed at promoting value-addition, shortening the value-chain, and making the benefit-sharing mechanisms more fair and inclusive (Ref. Activity A.1.1 and A.1.2) with activities aimed at stimulating entrepreneurship, including off-farm/non-agricultural activities (Ref. Activity A.1.1 and Sub-component A.2), with the overall objective of offering additional and more diversified income-generating opportunities to the households in the project area.

<ul style="list-style-type: none"> • The improvement of professional farmer training program is an important objective in government programs: While the program is well established and its contents is continuously reviewed and revised, the program faces two problems: (1) Coverage of the professional farmer training program: In national and provincial level poverty counties the program is implemented at the county level and funded through the Consolidated Poverty Reduction Funds (CPRF) budget with no prior earmarked funds for training. While the consolidate budget sufficiently large, most counties consider it more attractive to use the consolidated funds for more visible investments (e.g. infrastructure, housing, subsidisation of production, etc.). The professional farmer training is given insufficient priority. (2) Gender Prioritisation: The outmigration of male migrant workers leaves many farm households de-facto operated by women farmers. Women not only have to do most of the physical farm work, they also have to manage the farm's business operations, decide on the choice of products, buying and selling, investment decisions, participate of manage farmer cooperatives, join meetings, etc. In turn women not appropriately prepared for these tasks are particularly vulnerable even to the point that they are giving up the land. It is therefore critical to pay specific attention involving as many women farmers in the farmer professional training program 	<ul style="list-style-type: none"> • The project would incentivize the county governments to give higher priority in their New Professional Farmer Training Program to women and scale up the program by allocating more budget resources for this program. The disbursement would pilot a result-based lending (RBL) procedure. As a baseline for each of the 10 project counties the project will use the 2019 figures of professional farmers successfully trained by receiving a certificate. For each percentage point the baseline figures (number of trained people and percentage of women) would exceed the 2019 figures a prior agreed amount of money would be disbursed the end of the year a prior agreed amount of IFAD funds would be disbursed to the county treasury or to the project accounts. This approach will be piloted in Activity A.3.1 adopting a result-based lending approach.
<ul style="list-style-type: none"> • Pricing in RBLs - Emerging lessons from the World Bank's Guangxi Poverty Reduction Program for Results (PforR): In principle, pricing for RBLs can be either 'cost/expenditure-based' (i.e. disbursements are triggered by the documented execution of eligible expenditures), or 'value/incentive-based' (i.e. the required incentive to trigger the operator to deliver the outcome/result). The former method however presents several problems, as several actions that are critical to the achievement of the outcome/result are not directly related to expenditures. The World Bank Poverty Reduction PforR, approved in June 2018, adopts a value/incentive-based pricing. 	<ul style="list-style-type: none"> • The design team proposed the adoption of the value/incentive-based pricing for the pilot RBL activity in the project (Ref. Sub-component A.3). It is proposed that the project disburses a prior agreed amount of resources for each percentage point of 'women successfully trained in the program' (disbursement-linked indicator) above the 2019 baseline in each county. The agreed amount would be less than the actual training costs, but enough to provide a sufficiently attractive incentive for the counties to up-scale the program and to increase the percentage of women beneficiaries.

2. Project Description

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

13. **Project goal and development objective:** The project goal is to maintain poor and vulnerable households out of extreme poverty and increase their production and economic resilience. The project development objective is to improve income-generating opportunities for vulnerable rural people, particularly youth and women, increase the inclusiveness of the benefit-sharing mechanisms from agro-industries/private sector linkages, and increase the resilience of the rural population to climate change impacts.

This will be achieved by (i) strengthening and providing incentives to New Economic Entities to include poor households among their members, and introduce fair shareholding and benefit-sharing mechanisms (Ref. Sub-component A.1); (ii) stimulating additional and more diversified income opportunities, particularly for young and women, in the project area, by providing business services and stimulating and strengthening entrepreneurship opportunities and capacities (Ref. Sub-component A.2 and A.3); and (iii) addressing some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities (Ref. Component B). Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options - and plan and decide accordingly, and improving the climate-resilience of the infrastructure system.

14. **Key indicators:** The impact of the project would be measured through the following key indicators: (i) increase in households' income; (ii) increase in number of new jobs; (iii) increase in number of women reporting an adequate empowerment score in pro-WEAI index; (iv) increase in NEEs' profits; (v) increase in number producer organizations' members reporting new or improved services provided by their organization; (vi) increase in number of youth/women-initiated enterprises that are operational after

two years; (vii) increase in number of households adopting environmentally sustainable and climate-resilient technologies and practices; (viii) number of relevant policy/knowledge products completed - among other indicators (Ref. Annex I - Logframe). Indicators will be disaggregated by gender, age, and ethnic group, when relevant.

15. **Disbursement-linked indicator:** In addition to the key indicators above, three indicators will be used as disbursement-linked indicators (DLIs), i.e. indicators that will be used to trigger the disbursement of funds for Sub-component A.3 - in line with the result-based lending approach that will be pilot under this project: (i) incremental number of farmers completing the new professional farmer development training program (DLI-1); (ii) incremental number of women completing the new professional farmer development training program (DLI-2); and (iii) reduced age of the trainees completing the new professional farmer development training program (DLI-3).
16. **Expected outcomes:** Expected outcomes include: (i) strengthened inclusive New Economic Entities; (ii) enhanced participation of poor and vulnerable households in rural economic growth; (iii) local economic development enhanced; (iv) increased economic opportunities for women and youth; (v) enhanced resilience to the negative effects of climate change.
17. **Project duration:** The project will be implemented over 5 years.
18. **Project area:** The project will be implemented in 10 counties within the four municipalities/prefectures of Chengde, Xiangxi, Shaoyang and Chenzhou in the North-East and Western part of Hunan Province (i.e. Shimen and Taoyunan counties in Chengde prefecture; Guzhang, Fenghuang, Luxi and Longshan counties in Xiangxi Tujia and Miao Autonomous prefecture; Shaodong, Daxiang and Longhui counties in Shaoyang prefecture; and Rucheng county in Chenzhou prefecture). Shimen, Longhui, Guzhang, Fenghuang, Luxi and Longshan counties are located in the Wulin mountain area poverty block, and Rucheng county is part of the Luoxiao mountain area poverty block - thus are national-designated poor counties. In addition, Guzhang, Fenghuang, Luxi and Longshan counties belong to Xiangxi prefecture which is the only minorities inhabited prefecture in Hunan Province. Criteria for the selection of these counties included: currently or previously classified as national or provincial poverty counties, presence of industries (private sector) with a market potential, and commitment of the local government to the objectives and proposed approach of the project. The targeted project area is one of poorest areas at both national and at province level.
19. **Ethnic minorities in project area:** Though Hunan is not considered as a prime ethnic region of China, western and southern part of province are the home of some ethnic groups, accounting for 10% of the population. Five of the ten project counties are located in the so-called "cultural diversity area" of Hunan. In Xiangxi prefecture (western Hunan), Tujia and Miao ethnic groups account for 80% of the population in the prefecture. Four of seven poor counties of Xiangxi prefecture falls within the project area. Overall, about 30% of the population in the project area belong to ethnic minority groups. Main ethnic minority groups in the project area are: Tujia, Miao, Hui, Uygur, Yao and She people.
20. **Targeting strategy:** The project will adopt the following targeting strategy:
 1. **Geographical targeting:** the project will target current or former nationally- or provincially-designated poor counties, and - within these counties - priority will be given to villages and communities with a higher than county average concentration of registered or formerly registered-poor*. Based on the above criteria, 127 administrative villages in 66 townships have been pre-identified for project implementation. These represent about 4% of the villages and 36% of the townships in the project counties. The project would cover about 55 deep poor villages which accounts for 43% of the 127 villages in the project area. The poverty incidence in the project area is about 17%, nearly 50% higher than county average (11%) and ten-times higher than provincial average (1.5%). Net income per capita in the project area is about 30% lower than provincial average.

(*) The strategy to include current (at the time of design) or former (in the past 5 years) designated poor counties is meant to ensure that the project does target relatively poor counties. After 2020, when the Government is expected to declare eradication of extreme poverty, it is to be expected that no county will be anymore defined 'poor county'. The targeting strategy foresees that the project targets mainly poor communities and poor households within the selected counties (ref. poverty targeting). In both currently or previous poor counties, there are pockets of communities and households that are still poor - therefore the county selection does not diminish the project targeting on poor households.
 2. **Poverty targeting:** within the project area, focus will be on vulnerable people (i.e. households who have been registered at least once in the National Poor Registration System since 2014). It is in fact expected that no more households will be in the NPRS after 2020. (Presently 16% of target population in project area is registered in the NPRS).

The advantages of relying on 'households who have been registered at least once in the National Poor Registration System since 2014' as targeting category:

Adherence to this category for targeting offers several advantages: first, it allows precise targeting; second, it ensures full alignment with government poverty reduction strategies and efforts, as government is expected to keep track of the formerly registered poor after 2020 to avoid they fall back into poverty; and third, it enables the project to broadly target 'vulnerable' households (rather than strictly 'poor' households), as several of the formerly registered poor may have actually moved out of poverty in the period 2014-2020, but they would still remain vulnerable to shocks.

While the targeting strategy "focuses" on formerly registered poor, it does not however exclude households that have never been poor in the period 2014-2020, but may become poor after 2020. The measures that the project puts in place to minimize the risk of excluding people who become poor for the first time after 2020 include the financing rules for approval of business plan proposal, where inclusion of poor households is one of the criteria for accessing project co-financing.

The risk of exclusion is thus considered minimal. However, it is also possible that some poor households give preference to different livelihoods strategies (for instance, continue to rely on migrant labour), and decide not take advantage of the opportunities provided by the project interventions.

3. **Gender, youth and ethnic minorities targeting** among the project beneficiaries, specific focus will be given to vulnerable households, as well as: (i) women; (ii) youth (i.e. people between 18-45 years of age)[5]; and (iii) ethnic minorities. Particularly, the project will actively favour women and youth participation as follows:

1. **Women targeting strategy:** (1) Women participation in supported new economic entities will be promoted as follows: (i) Women-led enterprises/cooperatives will be encouraged: the project will support at least four women-led economic entities per county; (ii) sex-disaggregated eligibility criteria will be applied to select the economic entities to be supported by the project: percentage of women in these entities should be higher than the percentage of women in the local village; women should be included in the enterprise/cooperative's board; at least 60% of the participants to trainings and capacity building activities will be women particularly in professional farmer training program - where disbursement of project funds will be conditional to an increase of the percentage of women successfully competing the program (Ref. Sub-component A.3); (2) Women entrepreneurship will be favoured by awarding at least 25% of the start-up investment support to women. In addition to the above, a separate instrument under Sub-component A.3, which will be implemented adopting a result-based approach, is launched to specifically provide additional incentives to the county governments to give higher priority in their New Professional Farmer Training Program to women. This is expected to result in higher women empowerment. As part of its commitment to being gender transformative, a pro-WEAI survey will be undertaken at baseline and completion. The pro-WEAI survey will assess the increase in the participating women's agency and empowerment. Aspects of pro-WEAI will also be included in the Core Indicator Outcome Indicator Survey, particularly with regard to asset management and productivity
2. **Youth targeting strategy:** (1) Youth participation in supported economic entities will be promoted by supporting at least two youth-led entities per county; (2) Youth entrepreneurship/ start-up business will be favoured by awarding at least 50% of the start-up investment support to youth, of which 50% will be for young women.
3. **Ethnic minorities targeting strategy:** about 30% of the population in the project area belong to ethnic minority group. Ethnic minorities in the project area are in general well integrated in the existing socio-economic context, have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have not distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and not well developed areas. Government policies targeting rural poor and vulnerable households do not differentiate based on ethnicity, but target based on poverty indicators.

21. **Beneficiaries:** In total, the project is expected to directly benefit an estimated 328,000 individuals (or 72,500 households), out of which about 17% are formerly registered poor, 50% women, 30% youth, and 30% belong to ethnic minorities (i.e. direct beneficiaries). The project is expected to indirectly benefit about 413,000 people - or 88,000 households - including indirect beneficiaries. This corresponds to 62% of the eligible population in the ten project counties.

22. **The added value of the infrastructure component in terms of outreach of targeted population:** The project area is marred with unequal availability, access, and quality of infrastructures which are often quoted as one of the main factors of regional inequalities, particularly between better-off and poorer areas. In this context, the improvement of the infrastructure system in the project area is expected to overall develop the project area and improve the conditions and reduce the gap with more developed areas of the province. The infrastructure development under Component B will address major gaps and support the climate-proofed infrastructure systems in the targeted project area through a combination of physical improvement, institutional strengthening and technical assistance in order to promote inclusive, sustainable and climate resilient agricultural production rural livelihood. As the benefits generated by public infrastructures can be considered public goods, and as such equally accessible to the whole population of the project area, it is difficult to claim that the project target group will benefit more from the improved infrastructure system than the rest of the population. However, considering that poverty incidence in the project area is higher than the county and provincial average, it can be argued that overall the infrastructures supported by the project would incrementally benefit more IFAD target group. That being said, selection of the infrastructures to be supported by the project (particularly production roads, irrigation and water management systems, etc.) would in principle follow and be driven by the selection of the NEEs to be supported. Similarly, improvement of safe drinking water supply systems will primarily benefit villages and households that do not have yet access to safe drinking water, i.e. the poorest. Ownership of the farm to market roads,

irrigation systems and the water source facilities improved and developed under the project will belong to the beneficiary villages, water users' associations or farmers' cooperatives depending on the decision made by the respective county.

23. **How support to NEEs would ensure outreach to the target population:** The project will provide technical and financial support as an incentive to selected agri-business entities to stimulate them to establish inclusive and fair relationship with the project target group. Practically, the project will co-finance competitively-selected business plans as a means to efficiently allocate public resources to agri-business entities/ enterprise-cooperative joint ventures to promote the inclusion of the project target group in sustainable and profitable value chains through mutually beneficial contractual arrangements. The selection of the business plans will be on a competitive basis and will be based on selecting criteria, including (i) outreach of project target group; (ii) definition of fair and sustainable contractual arrangements with the project target group, and (iii) viability and sustainability of the proposal, among other criteria. The project would give preference to benefit sharing models which allow active participation of the target group beneficiaries in the economic success of agribusiness and enterprises (i.e. income from production, wage labour, or dividends as active members in a NEEs). Using land as a share would be given preference over leasing the land for an annual or one-time payment, but land leasing is acceptable as it reflects individual choice (i.e. risk perceptions) of part of the target group. The project engagement approach with pro-poor business plans and agro-businesses will be based on informed consultations to ensure that particular livelihood strategies of the different ethnic groups are taken into account, where existing. This will include discussions with subgroups (women, youth and ethnic minorities) to ensure the aspirations, inclusion barriers and needs of these groups are considered in the pro-poor business plans and agro-business development strategies, activities and investment plans. Under Sub-component A.3 (which will be implemented piloting a result-based lending approach), gender mainstreaming and empowerment will be ensured by targeting government on-going program of professional farmer training program.

D. Components/outcomes and activities

24. **Component A: Inclusive Private Sector Investment Models:** This component will create profitable livelihood and diversified income opportunities in the project area by (i) promoting inclusive private sector investment models that will generate new and more diversified income opportunities; and (ii) supporting talented young people and women to start their own business; and (iii) providing incentives to the government to increase the scale, the quality and the impact of the new professional farmers training program - a national training program aimed at training farmers to work in a context of agricultural modernization and transition. This component comprises three sub-components:
1. **Sub-component A.1: Demonstrating inclusive rural business development models:** This sub-component will pilot and demonstrate "inclusive rural business development models" by providing incentives (i.e. investment support) to (i) New Economic Entities that include vulnerable rural households, and particularly women and youth, in their business models - thus offering them the opportunity to participate in and benefit from the economic development opportunities in the project area, and (ii) youth and women entrepreneurs to stimulate their productive and self-development capacity. Project supported models will offer a variety of choices depending on individual capacity and risk perception. The project will encourage the adoption of technologies/practices that enhance resilience to climate change and reduce the risk of zoonotic diseases or enhance response control to SARS-CoV-2. Key activities under this sub-components include:
 - o **A.1.1: Investment support for rural businesses:** The project will provide financial support to new or existing professional farmer cooperatives which demonstrate viable and inclusive business models featured by genuine participation of vulnerable households and fair benefit sharing arrangements. Professional farmer cooperatives, among other business entities (e.g. individual entrepreneurs or lead enterprises), would be the primary focus under this sub-component. Project investments would mainly focus on value addition, market linkage and capacity building*. Building resilience to climate change will also likely be an important feature of the business plan proposals. Several proposals will in fact likely request financial support for adopting new varieties of seeds, introducing irrigation technologies, land improvement, and improved agriculture technologies, etc. The project will encourage the adoption of seed varieties resilient to temperature variations and droughts, water saving technologies (e.g. drip/drip irrigation, etc.), climate-smart agricultural technologies, etc. The project will also encourage proponents to present innovative investment ideas for risk reduction or mitigation in relationship to zoonotic diseases or in responsiveness to the control of SARS-CoV-2.

(*) The project investment proposals are demand driven and cannot be determined a-priori. However, the project will likely support locally advantageous and specialised cash products, because proposals will take into consideration markets demand and local conditions, among other factors. The annual AWPB process will reflect more specifically the types of crops/products to be supported by the project. Moreover, crop diversification is likely to be implemented as the project will provide specific training and advisory services to the investors in making improved business decisions, including production and market risk management (e.g. product and market diversification) and the inclusion of climate change risks and opportunities in business and investment decisions.
 - o **A.1.2: Business start-up support for youth and women entrepreneurs:** The project will provide start-up investment support as matching grant to acceptable investment proposals presented by youth and women entrepreneurs. Such investment will be conditional to a successful training and ongoing mentoring of the candidates and based on a viable business plan.
 2. **Sub-component A.2: Providing rural business development and livelihood services:** This sub-component will provide services and support (i.e. training on advisory services, facilities, etc.) to (i) talented young people and women to start their own business, thus retaining young business-minded people in the rural areas - or attracting them from other areas; and, (ii) to farmers to improve access to weather and climate forecast information and advice on options to make their farming practices and marketing more resilient to climate change. Specifically, this sub-component will support the concentration of currently scattered training activities in a comprehensive training and service centre with professional expert support, which would (i) provide a full range of business support services, and (ii) act as a hub for communication and business facilitation. Key

activities under this sub-components include:

- o *A.2.1: Establishing business incubation and service centers:* The project will support the setting up and operation of comprehensive Business Incubation and Service Centres at the county level. The centers will provide services, training and advice in business development (i.e. planning, financial management, loan applications, marketing skills, e-commerce, legal counsel, etc.). Such centres would also serve as a platform for young and women entrepreneurs and investors to match them with rural countryside investment opportunities (i.e. identify locations, partners, co-investment opportunities, land availability, etc.). The Centers would also set up and constantly up-date a data base of experts and service providers. The operating plan of the centres would introduce a decreasing cost sharing arrangement. The centres are expected to become financially sustainable by the end of the project through generation of their own revenues for the provided services.
 - o *A.2.2: Providing rural business and non-business services, including epidemic prevention and climate information services:* Promising entrepreneurs and emerging start-up enterprises will prepare business plans for review and potential support under sub-component A.1 above, and supported in the preparation with the provision of business services. In addition, the project will support services that include land services, pest and seed advice, veterinary services, promoting cultural activities, etc. Advisory services related to epidemic prevention and mitigation towards zoonotic diseases (e.g. SARS-CoV-2) will also be provided. The project will also improve farmers' and cooperatives access to weather and climate forecast information and advice on options to make their farming practices more resilient to climate change, i.e. (i) technical assistance to improve the analysis of the changes in crop climatic zones and of the climate risks associated with different crops; (ii) upgrade of a few meteorological stations to monitor key parameters relevant to agriculture; (iii) technical assistance to relevant county-level agencies to improve climate-related forecasts, advice, and early warnings; (iv) training to farmers in climate change risks and vulnerability management.
3. **Sub-component A.3: Promoting Gender Sensitive Professional Farmer Training:** The project will provide incentives the county governments to (i) increase the number of farmers participating and getting accredited under the New Professional Farmers Training Program [7] - a comprehensive training program, implemented by local authorities (counties and provinces) in the whole country, launched by the Ministry of Agriculture in 2014 with the objective of making farming a more attractive profession and as a basis for local economic development, by encouraging county governments to increase budget allocation for this skills training program from its Consolidated Poverty Reduction Fund (CPRF) budgets; (ii) attract and increase the proportion of women participating in the Program; and (iii) attract and increase the proportion of younger people participating to the Program. The disbursement will pilot a result-based lending (RBL) approach. The project will disburse a prior agreed amount of resources to the counties' treasury for each incremental percentage point of 'farmers successfully completing the program', of 'women successfully completing the program', and 'decrease in average age of trainees completing the program' (disbursement-linked indicators) against the 2019 baseline in each county. The agreed amount would be less than the actual training costs, but enough to provide a sufficiently attractive incentive for the counties to up-scale the program, increase the percentage of women beneficiaries, and encourage youth to attend*. The IFAD funds disbursed could be used for additional project activities or supplement the county Consolidate Poverty Reduction Funds [7]. This approach will be more cost-effective than financing a training program with the project resources since the allocation of project budget for this activity will be lower than the actual costs of the training. The project aims at scaling-up the program by (i) increasing at least by additional 1,000 successfully trained New Professional Farmers per year; (ii) reaching a proportion of at least 45% women among the participants who successfully completed the program by 2023 - thus contributing to pillar 1 of the gender strategy of the project (i.e. Women participation in supported new economic entities promoted); and (iii) lowering the average age of participants to the program to less than 40 years by 2023.

(*) Adequate level of incentives: The design team worked with the client on a differentiated system of incentives considering a balance of likelihood in achieving the targets (sufficient incentive) and cost-effectiveness (wasting resources). Since the 10 counties have given different importance of age, gender and number of trainees in the past, individual DLI targets and incentives in this sub-component are not equally allocated to each of the 10 counties. They reflect and aggregation of the entire project. Several counties showing already high proportions of women trainees would not benefit much from DLI2, while the county with the highest amount for DLI2 could get up to US\$140. Similar of other DLIs. Counties with already relatively young trainees or large number of trainees would receive less from the respective DLIs. Each DLI has its individual targets. It would not be possible by overachieving one DLI to compensate low targets in other DLIs.

Program Result-Based Lending

This sub-component will be implemented piloting a result-based lending approach. The disbursement for this activity will be triggered by three disbursement-linked indicators (DLIs), as confirmed by an independent third-party verification agency. The verification protocol is described in Section K - Organizational Framework, and Annex 8 - Project Implementation Manual.

Project has developed following three DLIs outcome indicators:

- o *DLI-1 - Incremental number of farmers completing the New Professional Farmer Development training program:* This DLI is defined as the additional number of farmers who complete the New Professional Farmer Development Program in the 10 project counties. *Baseline and formula:* The incremental number is calculated using the number of farmers who completed the training in 2019 as baseline*, and deducting the actual number of candidates successfully completing the training in any year from 2021 to 2025 minus the baseline number from 2019 in any of the 10 project counties. *Per unit value (pricing):* The unit value for each additional trainee is set at US\$ 300.
- o *DLI-2 - Incremental number of women completing the New Professional Farmer Development training program:* This DLI is defined as the additional number of women farmers who complete the New Professional Farmer Development Program in 10 project counties. *Baseline and formula:* The incremental number is calculated using the number of women farmers who completed the training in 2019 as baseline*, and deducting the actual number of women successfully completing the training in any year from 2021 to 2025 minus the baseline number of women trained in 2019 in any of the 10 project counties. *Per unit value (pricing):* The unit value for each additional women trainee is set at US\$ 200.
- o *DLI-3 - Reduced average age of the trainees completing the New Professional Farmer Development training program:* This DLI is defined as the reduced average age of the trainees who complete the New Professional Farmer Development Program in the 10 project counties. *Baseline and formula:* The reduction in the average age of the trainees is calculated using the average age of the trainees who completed the training in 2019 as baseline*, which is deducted from the actual number of trainees times the average age in any year from 2021 to 2025 in any of the 10 project counties. *Per unit value (pricing):* The unit value for each year in the total age of the trainees is set at US\$ 10.

(*) Rationale for using 2019 data as baseline: 2019 data are considered the best of the available baselines. They fully reflect the pre-COVID situation. 2020 data would likely be distorted. By the start of the project the overall economic recovery might not be fully back to pre-COVID levels, but the distortions vis-à-vis the 2019 baseline are likely minimal.

25. **Component B: Climate-proofed public infrastructure planning, development and improvement:** Linked to the new/re-furnished or adapted value-chain infrastructure requirements identified in Component A, this component will address gaps in the current infrastructure which may limit or constrain the implementation of the project activities. Improvement of the infrastructure system will be achieved through a combination of physical improvements, institutional strengthening and technical assistance, which will also result in a reduction of the risks and the impacts associated to changing weather and climate conditions, and a more sustainable and climate resilient agricultural production. This component is organized along two sub-components:

1. **1. Sub-component B.1: Improving infrastructures' climate resilience:** This sub-component will support the development and improvement of climate-resilient water supply systems in the project area to enhance agricultural productivity and improve resilience to climate change. Key activities under this sub-component include:
 2. *Activity B.1.1: Piloting climate-proofed smart irrigation investments:* This activity would support improvement and development of irrigation water supply systems (e.g. canals), including rehabilitation and development of water harvesting and water source structures (e.g. water pools, water ponds) and pumping station and delivery systems (e.g. pressure pipelines) to provide water to agribusiness entities and farmers. These interventions would contribute to enhancement of agricultural productivity, agriculture diversification, and increased climate resilience. A preliminary estimation of the activities to be supported include: rehabilitation and development of 174 km canals, 56 km pressure pipelines, 24 pumping stations, 7,521 head control and system, 108 water pond, 130 water cellar, 305 water pool, 136 culvert, 82 retaining dam and 59.9 km drainage ditch. These interventions would develop and improve 7,219 ha irrigation area distributed 111 village in 60 townships.
3. **3. Sub-component B.2: Improving rural infrastructure system:** This sub-component will address some of the major gaps in the current infrastructure system in the project area, which may limit or constrain the implementation of the proposed project activities: incomplete rural road network, lack of drinking water and/or electricity supply facilities, segmented and sloping agricultural land, etc. All infrastructures supported under this sub-component will be climate-proofed. Key activities under this sub-component include:
 4. *Activity B.2.1: Improving and developing safe drinking water supply system:* The project will support (i) the development and improvement of water supply pipelines (estimated 91 Km) to those villages that lack access to safe drinking water, or whose existing systems/facilities are deteriorated; and (ii) the development and improvement of (estimated 47) water storage ponds.
 5. *Activity B.2.2: Improving and developing rural roads:* The project will support the development and improvement of village, production, and access roads, which will serve both agribusiness entities and village farmers. The project would support development of an estimated 192 km village roads, 267 km production roads, 192 km earth roads in 106

villages located in 59 project townships.

6. *Activity B.2.3: Improving and extending power supply system:* The project will support the improvement and extension of (estimated 12 Km) electricity lines and the establishment and rehabilitation of (estimated 5) transformers, as a critical element to support the development of the rural areas, in line with the concept of "rural revitalization".
 7. *Activity B.2.5: Land preparation:* The project will support the development of (estimated 286 ha of) land terracing of cultivated slop lands, and (estimated 1,527 ha) land levelling in order to enable safe and productive farming and soil and water conservation.
 8. *Activity B.2.5: Improving environment:* The project will support the construction of (i) non-point source pollution; (ii) ecological interception ditches (estimated 13 Km); (iii) farmland waste recycling pools (estimated 589); (iv) (estimated 1,044) sanitary toilets, (v) (estimated 3,707) street lamps, and (vi) (estimated 120) ecological ponds and (estimated 53,500 m²) constructed wetland.
 9. *Activity B.2.6: Supporting infrastructures' operation & maintenance (O&M):* The project will support (i) the establishment and strengthening of O&M organizations; and (ii) implementation of normative O&M activities during the project life time. Women will be involved in Village Infrastructure O&M Committees and Water User Associations. Meanwhile, for ensuring women's capacity for participating in decision-making, women will share half of the O&M training opportunities.
26. **Component C: Project Management, Knowledge Management, M&E, and Policy Engagement:** This component will support the planning, coordinating, monitoring, reporting and overall management functions of the project management offices (PMOs) at provincial and county level. An important partnership will be established with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AI-CAAS) for the provision of support in monitoring and evaluation functions, knowledge management, and policy engagement (Ref. Sections on knowledge management, policy engagement and scaling-up).
27. **Components coordination and sequencing:** Awareness building and mobilisation of new economic entities and other key stakeholders will be implemented first, to ensure a bottom up approach in the selection of new economic entities and to drive the selection of infrastructure to be financed by the project. To allow for synergies with the component A investments, the first infrastructure investments are deferred to year 2 of the project, assuming that the NEEs' business proposals will take some time to be developed. Before any infrastructure investments are made Water Users Associations and other Operation & Maintenance associations should be formed and they should be involved in decisions on the design and the preparation of the O&M plan for each infrastructure.

E. Theory of Change

28. **Industrialization as key strategy for poverty reduction - the role of the "new economic entities" in the rural new revitalization strategy, and the challenge of making them "inclusive":** Promoting thriving "industries" (i.e. agribusiness development) and linking them with farmers for income generation has been the primary approach in government poverty reduction programs (i.e. *chanyie fupin*, poverty reduction through industrialization) over the past decade. Agricultural "industrialization" remains a central pillar in the new rural revitalization strategy - a long-term strategy that aims at making rural areas a liveable place for all. The "industrialization" agenda in the new rural revitalization strategy builds on the idea of supporting the economic development of rural areas through the support to a large set of private sector operators, or "new economic entities", which include farmer cooperatives, big household farmers, family farms, and lead agro-enterprises or dragonhead enterprises. However, how and to what extent the benefits generated by the support to these private entities would translate into benefits to the poor and vulnerable groups remains uncertain. This is relevant in the poor areas, such as those targeted by the project, where a large share of population would remain vulnerable after 2020. **The New Professional Farmer Development Program as a possible entry point to contribute to agricultural modernization and rural revitalization:** The New Professional Farmers Development Program is a comprehensive training program launched by the Ministry of Agriculture in 2014 with the objective of making farming a more attractive profession and as a basis for local economic development. The purpose is to provide capacity development to a variety types of farmers who choose farming as a profession, to make them more capable to work in a context of agricultural modernization and transition. This program is expected to respond to the needs of modern agriculture and provide robust foundation to rural labour force to stay in rural areas and in the agriculture sector - ultimately contributing to rural economic development and rural revitalization. As of today, most of the trainees who have successfully completed the program have been involved in the establishment and running of farmers cooperatives and agro-entities. Thus, the New Professional Farmers Development Program provides an important entry point to agricultural industrialization and rural revitalization. However, coverage is still limited and the number of those who successfully completed the program is still relatively low, mainly because most counties consider more attractive to use the consolidated poverty reduction funds (from which this program is financed) for more visible investments (e.g. infrastructure, housing, subsidisation of production, etc.) rather than for capacity building; the number of women attending the program is still limited, despite the fact that, because of migration of male labour force to urban centers, women represent a significant share of agricultural labour; and the average age of the participants is relatively high - suggesting there is a significant scope to improve and scale-up the program, and deepening its impact.
29. **The current baseline scenario:** In the current base scenario, the project area and the relative poor and vulnerable households still face a mixture of constraints: (i) limitation in income-generating opportunities; (ii) outflow of rural labour force to urban areas - leaving the old, children and part of the women population behind; (iii) limited household resources for investments in agriculture or other economic activities (household resources are primarily invested in the education of the children); (iv) limited scale of household land holding, often insufficient for a family to generate the income required to stay above poverty levels, and progressive land consolidation (i.e. leasing of land to enterprises); and (v) inability of smallholders to effectively operate collectively and enter value chain, preventing them to be competitive; (vi) local governments' preference, on the use of the

consolidated poverty reduction funds, to visible investments rather than capacity building; (vii) women have generally less control over inputs and rural credit than men; and (viii) increasing rainfall variability and frequency of unusual weather events and other risks (price fluctuation & epidemics) are seen as growing uncertainties to agricultural production in the project area.

30. **The challenges in the current scenario:**

1. **Would the new operators be able to include and benefit the poorer and vulnerable people?** While "industrialization" remains a key strategy for poverty reduction and for revitalizing the rural areas, the approach adopted by the government over the past decade, which focused on reaching the smallholder households through "dragonhead enterprises", showed several shortcomings, did not always bring the desired results and/or guaranteed sustainability. There are evident gaps in inclusiveness (linking to more poor farmers and households), fairness and equality (in benefit sharing), efficiency (of government support), and sustainability (lasting of relationship). While the industrialization approach envisioned in the new rural revitalization strategy potentially reduces some of the shortcomings of the previous approach, as it expands the support to a larger and more diverse set of private sector operators, questions on the extent by which the new operators would be able to include and benefit the poorer and vulnerable people remain relevant.
 2. **How young people can be retained or brought back in rural areas?** China's imbalanced rural and urban development along with a rapid urbanisation has resulted in a severe outflow of human and financial resources from rural areas. This does not only involve the active workforce of the middle-age generation, but also the young people and the next generation. Money earned in agriculture is not invested back in the rural areas to create or sustain attractive job opportunities encouraging the youth and the middle age generation to stay, but is invested in the purchasing properties in urban and semi-urban areas and in the education of the children with the objective for them to move out of agriculture to better paid occupations in towns and cities. This combined outflow of money and human resources has rapidly eroded the attractiveness of rural areas for young people. A key challenge in the rural revitalization program is to break this vicious cycle and provide incentives for young people to stay and/or attract business minded young people from other areas back to start their own businesses or undertake other farm and non-farm business activities. This is equally important for young and middle generation women in rural areas, which constitute a significant potential for entrepreneurship and new business operations. Often, they must stay in the villages, while the husband is migrating for work, and they have proven to be able to run highly successful rural businesses in their villages.
 3. **How can the New Professional Farmer Development Program be improved, expanded, and its impact deepened?** The New Professional Farmer Development Program provides an instrument to strengthen the capacity of farmers, preparing them to work in a context of agricultural modernization and transition, providing them with more tools to remain in rural areas - ultimately contributing to the broad objectives of rural revitalization. There is an anecdotal evidence that trainees who have participated in the program have contributed to local agricultural development and poverty reduction, although more formal evaluations are still lacking. However, coverage of the program is still limited and the number of those who successfully complete the program is still relatively low, mainly because most counties consider more attractive to use the consolidated poverty reduction funds (from which this program is financed) for more visible investments (e.g. infrastructure, housing, subsidisation of production, etc.) rather than for capacity building; the number of women attending the program is still limited, despite the fact that women represent a significant share of agricultural labour; and the average age of the participants is relatively high. A key question is how to encourage county governments to increase budget allocation for this training program from their consolidated poverty reduction fund budgets; how to attract and increase the proportion of women participating in the program; and how to attract and increase the proportion of younger people participating to the program.
31. **Turning the challenges into opportunities:** The current situation offers an opportunity to (i) introduce and demonstrate elements in the new industrialization approach through new economic entities which would make these operators fair and inclusive; (ii) pilot some incentive measure that could potentially retain or attract young people in rural areas and start their own business or economic activity; and (iii) pilot an incentive system to encourage local governments to improve and expand the new professional farmer development program. This could have potential value in informing the government on its pursuit for rural revitalization.
32. **The proposed approach:** The project would support economic growth, competitiveness and the creation of income-generating and livelihood opportunities in rural areas, and favour the participation of vulnerable people, particularly women and youth, to benefits generated by this process by (i) demonstrating inclusive rural business development models; (ii) stimulating local entrepreneurship and providing investment support to youth and women entrepreneurs; and (iii) upgrading the skills and capacity of rural people, in particular women and youth, to become business-oriented farmers or entrepreneurs through professional training.
33. **How the approach will be operationalized:** This will be achieved through: (i) capacitating new economic entities as the main entry point to link poor farmers to markets (Ref. Sub-component A.1); (ii) stimulating additional and more diversified income opportunities in the project areas by providing services and stimulating local entrepreneurship (especially among women and young farmers/migrant returnees), and attracting new investors in agricultural or (rural/resource-based) non-agricultural activities (Ref. Activity A.1.1 and Sub-component A.2 and A.3); (iii) addressing some of the major gaps in the current infrastructure system in the project area (e.g. road access, water scarcity, etc.) which may limit or constrain the implementation of the proposed project activities, while at the same time reducing the risks associated to climate change (Ref. Component B).
34. **Expected outcomes:** With these strategy and interventions, (i) additional income generating opportunities for targeted rural people will have been generated; (ii) more equitable and sustainable business partnership with new economic entities will be developed for farmers so that added value of farmers' products or services will be attained; (iii) more young people and women will find business opportunities at home and investment in rural sectors will be promoted - which will also help mitigating the labor and finance outflow; (iv) potential climate risks will be mitigated; and (v) those farmers who got rid of poverty will have less likelihood of reverting to poverty. These will help achieving the project objectives and goals, and contribute to revitalizing the rural areas along with other measures taken by government.

35. **Contribution to IFAD's mainstreaming priorities:** The project contributes to three IFAD's mainstreaming priorities. The project will produce gender transformative outcomes as it strengthens women's agency and economic empowerment by developing women entrepreneur network in the project areas and outside to facilitate experience sharing and strengthening linkages between women farmer networks and customers through public and private sectors, local markets and digital platforms to develop existing and cultivate new women-led businesses; developing and building a cadre of facilitators/leaders of women's associations as role models on skills related to entrepreneurship, organizational leadership and confidence-building, communication, information, monitoring and management capacity. The project aims at creating enabling environment for rural women's meaningful participation and gender responsive policy shifts. For example, (a) the Chairperson of county Women Federation will be assigned the role of deputy project director at the county CPMO, with a specific role in overseeing the gender related aspects and activities of the project, and facilitating gender transformation in the project context; (b) UN Women have contributed to the design of the project (i.e. by contributing with some analysis, design surveys, etc.) and will continue to support the implementation of the project (i.e. by designing, organizing and conducting specific trainings, etc.) to promote women capacity and economic empowerment in the project area; (c) the Women Federation (WF) and Youth League (YL) in the counties will be also be assigned responsibilities in undertaking women and youth related activities designed for the project and (d) The project will organize a conference together with line departments and relevant agencies and partners (e.g. Women Federation, UNWomen, etc.) to discuss – based on the lessons and experience generated by the project – women's role and contribution in poverty alleviation, innovative and practical modalities of women's empowerment in a changing climate, and possible policy reforms from the government. The project is conceived as a "demonstration" project and will pilot the Programmatic Results-Based Lending (RBL) on the Sub-component A.3 Promoting Gender-Sensitive Professional Farmer Training along with testing its applicability and promoting it as replication model. The project will also aim at creating champions who are among the national and provincial stakeholders and who will in-turn learn and replicate ideas and experiences derived from the project. The project will organize international conference together with line ministries or other government officials to elaborate women's role and contribution in poverty alleviation, explore innovative and practical modalities of women's empowerment in a changing climate, and discuss on necessary policy reforms and commitments from the government. The project will attract youth to agriculture through piloting incentive measure that could potentially retain or attract young people in rural areas and start their own business or economic activity such as Youth entrepreneurship/ start-up business will be favoured by awarding at least 50% of the start-up investment support to youth, of which 50 percent will be for young women and youth participation in supported economic entities will be promoted by supporting at least two youth-led entities per county. These targeted interventions have strong potential to generate sustainable and remunerative employment opportunities for youth, making the project a youth sensitive project

F. Alignment, ownership and partnerships

36. **Alignment with national priorities and strategies:** The project is well aligned with the national priorities and strategies as it will (i) contribute to the government's objective of sustaining the poverty reduction achievements beyond 2020, in line with the principles of the rural revitalization strategy, where "sustaining poverty eradication efforts" represents a key priority in the strategy; (ii) promote new economic entities, create employment opportunities, and develop the infrastructure system in rural areas, in line with the rural revitalization strategic approach; (iii) contribute to make the project area economically more attractive, thus retaining migrant workers, particularly youth, and possibly attracting people back to the rural areas; and (iv) promote environmental sustainability, in line with the government's concepts of 'ecological civilization' and 'ecologically-balanced development'. The project, and particularly sub-component A.3 - Promoting Gender Sensitive Professional Farmer Training, is aligned and supports the No.1 Document 'the Implementation of the Strategy of Rural Revitalization' (February 2018), which called for an accelerated effort to invest in new professional farmers as a critical step to boosting agricultural development, rural revitalization and ending extreme poverty. The document highlighted that building capacity of knowledgeable and skilled farmers is the fundamental force for improving agricultural productivity and innovation and improving the quality of rural employment.
37. **Alignment with Sustainable Development Goals (SDGs):** The objective and activities of the proposed project are aligned with and will contribute to the Agenda 2030, and, more specifically to SDG1 (eradicating poverty), SDG2 (ending hunger and malnutrition, achieving food security and promoting sustainable agriculture), SDG5 (achieving greater gender equality and empower women), SDG10 (reducing inequality within China), SDG13 (reducing the impacts of climate change), and SDG15 (managing sustainably natural resources and halting and reducing land degradation).
38. **Alignment with COSOP 2016-2020:** The project is the forth investment operation to be designed under the current 2016-2020 COSOP, and it well reflects the recent trend of focusing IFAD support towards enhancing income opportunities and increasing resilience by promoting and strengthening cooperatives and agribusiness entities, giving more emphasis to improving access to markets and value-chains, and resilience to climate change. The project supports the COSOP 2016-2020 strategic objectives 1 (Increase smallholders' capacity and opportunities to access markets) and 2 (Strengthen environmental sustainability and climate resilience), and particularly thematic area of focus 1.A (Support inclusive and safe value chain development), 1.B (Support inclusive cooperatives), and 2.B (Mainstreaming environmental and climate resilience considerations). The project is also fully aligned with and supports the three COSOP 2016-2020 strategic thrusts (i.e. innovation, knowledge management to inform policy, and scaling-up). The project is conceived as a "demonstration" project, which will introduce several innovations (e.g. inclusive private sector investment models, disbursement against results, climate-proofed design of infrastructure, etc.) to test their applicability in the project context, learn lessons, and promote replication of the models and approaches that demonstrate themselves successful. The scaling-up/policy-engagement strategy is built around two main elements: (i) The role of the provincial Department of Agriculture and Rural Affairs (DARA), which is part of the Ministry of Agriculture and Rural Affairs, as lead implementing agency. A budget for policy activities under Component C has been included to favour and provide sufficient resources to implement activities aimed to this purpose; (ii) The partnership with All-CAAS, which is expected to provide support in M&E functions, KM, and policy engagement.
39. The project is aligned to and contributes to the "programmatic" approach envisioned under the COSOP as it has to be considered part of a series of IFAD-funded projects within a broader programmatic framework. H2RDP is the seventh project in IFAD portfolio that introduces and pilots improved 'poverty reduction through agribusiness development' models. All these projects

adopt/pilot different 'poverty reduction through agribusiness development' approaches in different provinces, with the broad "programmatic" objective of contributing to learn about the conditions that make the different models more or less successful, and compare the strengths/weaknesses of the different models. Lessons are systematically captured, cross-learning favoured (for instance by favouring exchanging visits among projects and implementing a project mentoring program, by which older projects transfer knowledge and support the new ones), and knowledge generated by the projects used for policy engagement (for instance, during the annual portfolio review meetings with the Government, during as-hoc policy events, such as the Seminar on "Lessons on *chaniye fupin* models from SSADeP, policy implications, and their applicability/replicability in China", or the review conducted by IPRCC).

40. **Alignment with UNDAF 2016-2020 and draft UNSDCF 2021-2025:** The project is in line with and contributes to the priority areas of the UNDAF 2016-2020, and particularly with priority area 1 (Reduction of Poverty and Equitable Development)/ outcome 1 (more people, particularly the vulnerable and disadvantaged, enjoy improved living conditions and increased opportunities for economic, social and cultural development), and priority area 2 (Improved and Sustainable Environment)/ outcome 2 (more people enjoy a cleaner, healthier and safer environment as a result of improved environmental protection and sustainable green growth). The project is also in line and is expected to contribute to the strategic priorities of the draft UNSDCF 2021-2025, currently under preparation, and particularly to strategic priority 1/ outcome 1/ output 1.1 (China's capacity to [...] better incentivize and stimulate public and private innovation and investment to reduce skills mismatches, income inequality and the gap between urban and rural areas, and consolidate achievements in poverty alleviation strengthened), output 1.2 (Capacity of China's government [...] to promote [...] access to equitable [...] job opportunities [...] for all persons of working age in diverse forms of work arrangements strengthened), and strategic priority 2/ outcome 3/ output 3.1 (Farmers, fishers, and livestock owners - both male and female - have enhanced skills, ability, and access to adopt and implement sustainable and resilient practices in their work), output 3.2 (The Government has strengthened capacity and resources to develop, implement and enforce sustainable agriculture, production and consumption, and biodiversity conservation policies and investments at national and local levels), and output 3.3 (China develops and adopts innovative technologies, approaches, and gender-responsive practices in support of climate and disaster resilience and biodiversity conservation, including for left-behind groups).
41. **Alignment with IFAD' Strategic Framework 2016-2025.** The objective and activities of the project are in line with the IFAD Strategic Framework 2016-2025 goal and strategic objectives, particularly strategic objective 2 (increase poor rural people's benefits from market participation) and strategic objective 3 (strengthen the environmental sustainability and climate resilience of poor rural people's economic activities).
42. **Alignment with Transition Framework:** The strategic approach of the IFAD country program in China (as elaborated in the COSOP 2016-2020) is in line and supports the principles of the Transition Framework (2018) in terms of adoption of a mix and diversified lending and non-lending instruments (e.g. investments, knowledge/policy dialogue, SSTC, etc.), increase co-financing (particularly domestic co-financing), and alignment with partners approach (e.g. contribution and alignment to/with UNDAF/UNSDCF). Specifically, the proposed project implements several of the principles and elements of the Transition Framework. In particular, it will (i) pilot one of the new proposed products under IFAD11 (i.e. the result-based lending, RBL - and particularly the 'hybrid' model, i.e. an operation with both programmatic RBL components and traditional investment project components), with the objective of informing IFAD on the applicability of this instrument widely across its portfolio; (ii) contribute to informing policy-making: a strategic partnership with the Chinese Academy of Agricultural Sciences (CAAS) will be established precisely to extract and document knowledge from the project and utilising it to inform policy making; and (iii) significantly contribute to increase co-financing, particularly domestic co-financing: the project is expected to mobilise resources in a 1:1.9 ratio, about 35% above the IFAD11 target of 1:1.4 (and more than two-times above the 1:0.8 target for domestic co-financing), and above the COSOP target of 1:1.5.
43. **Alignment with IFAD11 mainstreaming agenda:** The project directly supports three of the four IFAD-11 thematic priorities, as it promotes gender empowerment, foster opportunities for the youth, and addresses or reduces the impacts of climate change.
44. **Alignment with Private Sector Engagement Strategy:** This project is aligned with and directly contributes to the objectives of the IFAD's Private Sector Engagement Strategy, i.e. mobilize private funding and investments, and expand markets and increase income and job opportunities for IFAD's target groups, as it will use loan resources to attract domestic private sector investments and develop inclusive value-chain to foster proposals from new economic entities (Ref. Activity A.1.1), or support entrepreneurs and investors, particularly young and women, to start their business (Ref. Activity A.1.2) - thus contributing to expand the market opportunities and increase the income and job opportunities for the project target group.

G. Costs, benefits and financing

a. Project costs

45. **Country eligibility and PBAS allocation 2019-2021:** China is eligible for IFAD financing, and it officially confirmed its intention to borrow from IFAD during IFAD11 in 2018. China was included among the countries that would benefit from IFAD11 resources. On the basis of the PBAS formula, US\$ 134.99 million were allocated to China for the period 2019-2021, and the proposed project included in the IFAD program of loans and grants (PoLG) 2019-2021. The country allocation was re-confirmed in December 2019.
46. **Project costs:** The total project cost is estimated at US\$ 173 million, including contingencies. The total base cost is US\$ 167 million; physical and price contingencies account for an estimated US\$ 6 million (i.e. 4% of the total base cost or 3.4% of the total project cost). Project costs are allocated among the three components as follows: (A) Inclusive Private Sector Investment Models (53% of the total project cost); (B) Climate-proofed Public Infrastructure Planning, Development and Improvement (40% of the total cost); and (C) Project Management, Knowledge Management, M&E, and Policy (7% of the total cost). Costs per component and sub-component, and financier are reported in Annex 3.

b. Project financing/co-financing strategy and plan

47. **Project financing and co-financing:** IFAD will contribute to the project with a loan for a total amount of US\$ 60.2 million (35% of the total project cost). The Government will contribute US\$ 90.9 million (53% of the total cost), and the Private Sector, i.e. participating enterprises and cooperatives, are expected to contribute approximately US\$ 21.4 million (12% of the total cost). The beneficiaries' contribution is expected to be approximately US\$ 0.5 million (less than 1% of the total cost). A partnership with UNWomen to support gender mainstreaming and empowerment is established. The scope of the partnership with UNWomen is limited to technical assistance, for an estimated value of about US\$ 0.3 million. Costs by expenditure account are presented in Annex 3.
48. **Co-financing ratio:** The IFAD loan has a co-financing ratio of approximately 1:1.9. This is about 35% above the IFAD11 target of 1:1.4 (and more than twice above the 1:0.8 target for domestic co-financing).
49. **Climate financing:** Project sub-components A.1, A.2 and B.1 are counted as climate finance. As per the multilateral development banks' methodologies for tracking climate change adaptation and mitigation finance, the total amount of IFAD climate finance for this project is calculated as US\$ 24.7 million, which represents 41% of the total IFAD project amount.
50. **Co-financing strategy:** The project co-financing strategy is in line with the IFAD co-financing strategy in China outlined in the COSOP 2016-2020, where focus is placed on leveraging domestic co-financing (from Government and other domestic parties, i.e. the private sector, financial institutions, cooperatives and beneficiaries). Particularly, Government's co-financing will be equivalent to about 1.5 times IFAD's contribution (i.e. US\$ 90.9 million), well-above the co-financing ratio of 1:1 applied in projects designed in IFAD9 and IFAD10. In addition to Government's contribution, about 12% of the project budget (i.e. about US\$ 21.5 million) is leveraged from non-government partners (i.e. cooperatives and agro-enterprises, and beneficiaries).
51. **Opportunities for international co-financing:** Opportunities for co-financing with other international partners were sought, but did not materialize. It is important to note that co-financing opportunities with other international financiers in China are limited. First, borrowing provinces must not have exceeded their debt ceiling: it is thus difficult for a province to borrow too many international resources at the same time, and it is thus rare to observe a concentration of international resources in one single province - particularly in the same sector. Second, as a general principle, the National Development and Reform Commission (NDRC), the government institution in charge of defining the pipeline of internationally-financed projects in China, tends to favour equal opportunities and even distribution of international resources among the provinces, thus discouraging concentration of international resources in one single province. Even within the same province, for the same principle, the Provincial Development and Reform Commission (PDRC) also discourages a concentration of donor resources in the same counties. Within this context, international co-financing is difficult, if not explicitly discouraged. A partnership with UNWomen to support gender mainstreaming and empowerment in agreed area of interests has been identified (Ref. Project management and coordination section). The scope is limited to technical assistance, for an estimated value of about US\$ 300,000.

c. Disbursement

52. Disbursement

53. H2RDP's withdrawal and utilization of loan proceeds are governed by the IFAD's Loan Disbursement Handbook (LDH) and the Financing Agreement between IFAD and the Government of China. Applicable procedures for disbursement, financial reporting and maintenance of appropriate project records will be described in detail in the Letter to the Borrower subsequently after the signature of the Financing Agreement.
54. Once the Financing Agreement of H2RDP enters into force, the Ministry of Finance will on-lend the funding to the Hunan Provincial Department of Finance (HPDoF). At the same time – under the same terms and financing conditions - the HPDOF will on-lend the funding to the County Finance Bureaus.
55. According to the new Budget Law and the Decree 85 issued by MoF, IFAD loan is required to be included in government budgeting system. However, IFAD funds will be managed by the government treasury. The County PMOs are responsible for preparing the project annual plan and submitting to PPMO for consolidation. Since the required counterpart funds will be fully raised by county government, the CPMOs will be responsible for ensuring that the County Project Leading Group has the required counterpart funds committed in county government's annual budget.
56. An online guided overview of the practices and procedures of IFAD is available for project staff. Project staff is encouraged to avail this training to ensure an efficient disbursement and an appropriate fiduciary control.
57. Three standard disbursement procedures are available for H2RDP:

1. Advance withdrawal

2. Direct payment
3. Reimbursement

58. Advance withdrawal

59. This disbursement procedure is used to advance funds to a bank account as designated by the borrower. IFAD will place a ceiling on the amount to be advanced, which will be sufficient to cover the average projected eligible expenditures of H2RDP for a period of six months.
60. The ceiling amount will also depend on the level of expenditure reported, and the projections established on the AWPBs. IFAD will ascertain and certify clearance of the figure to be advanced, which may vary during the implementation of the project.
61. The advance withdrawal will be the principal method to be used for the disbursement of H2RDP. The main conditions precedent to withdrawal the initial advance are: (i) evidence that the DA has been opened, and (ii) delegation of authority of the persons who will sign the withdrawal applications on behalf of the borrower. H2RDP will use the IFAD Client Portal (ICP) for the submission of withdrawal applications.

62. Direct payments

63. This disbursement procedure is used for eligible project expenditures to be paid directly by IFAD as per request of the PPMO. This procedure is generally suitable for payment of large civil works, consultant fees (when these are of substantial magnitude), importation of goods for which a letter of credit is not practical, and when exchange control regulations are present in the country. The minimum value threshold for direct payments is specified in the LTB.

64. Reimbursement

65. This disbursement procedure will be applicable when eligible expenditures have been pre-financed by the project for suppliers of goods, works, consulting or other services that have been incurred by the project from its own funds.

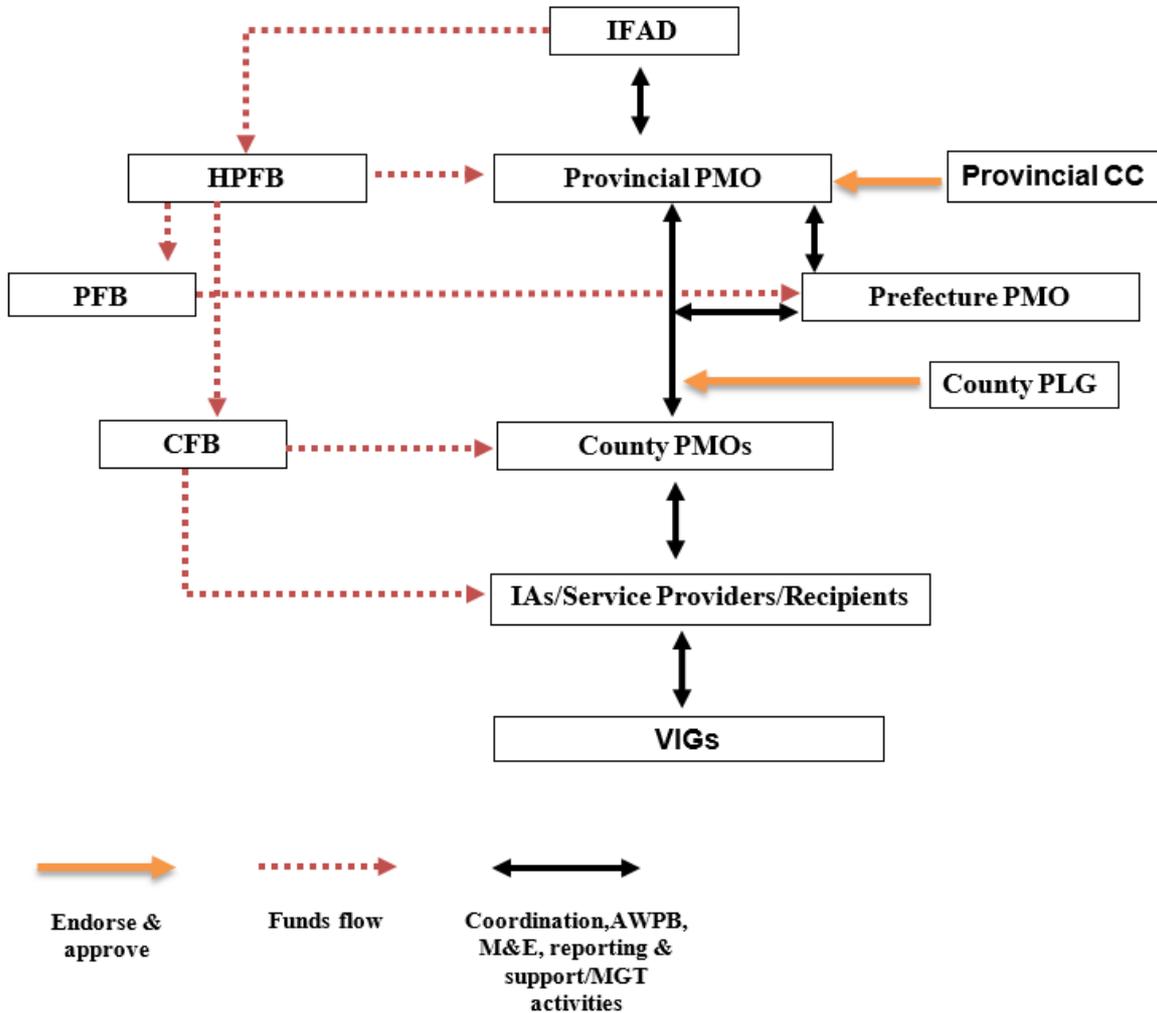
66. Flow of Funds

67. The Hunan Provincial Department of Finance (HPDoF) will open and maintain a Designated Account (DA) for the exclusive use of the loan proceeds of H2RDP. The HPDoF will be directly responsible for the management, maintenance and reconciliation of the DA. The DA will be administered following imprest arrangements, in which an initial amount of the loan is advanced and then replenished periodically based on justified expenditures. The advances from the Financing will be segregated from other funds of the Project.
68. The counties PMOs will prepare execution reports that will be reviewed by its corresponding County Finance Bureau before submission to the PPMO for additional review and consolidation. The HPDoF will provide final approval and transfer funds to the County Finance Bureaus (except for counties in Xiang Prefecture, where funds will flow through the prefecture Bureau of Finance). Then the finance bureaus at the request of the CPMOs will transfer funds to the Implementing Agencies (AI) or pay Service Providers. The Prefecture PMO at Xiangxi will be established solely to provide oversight to project implementation in its respective counties.

69. H2RDP FLOW OF FUNDS

70. HPDOF - Hunan Provincial Finance Bureau
71. PFB - Prefecture Finance Bureau
72. CFB - County Finance Bureaus

- 73. VIG - Village Implementation Groups
- 74. County PLG – County Project Leading Group
- 75. Provincial CC – Provincial Coordination Committee



76. Counterpart financing

77. The Government will contribute US\$ 88 million (52 percent of the total cost). The Private Sector, through participating enterprises and cooperatives, are expected to contribute approximately US\$ 14.8 million (9 percent of the total cost). The beneficiaries' contribution is expected to be approximately US\$ 4.8 million (3 percent of the total cost).

78. For those activities financed by counterpart funds, the CPMOs will record their transactions in the web-based integrated software used for IFAD financing under a proper audit trail. Detailed disbursement procedures and funds flow arrangement will be described in the project FMM.

79. Taxes

80. In accordance with the Section 11.01 of the General Conditions, the use of any proceeds of the Financing to pay Taxes is subject to the IFAD's policy of requiring economy and efficiency in the use of its Financing. Therefore, for H2RDP, IFAD financing will include Taxes provided that these are not excessive, discriminatory or otherwise unreasonable. It is expected that most of the expenditures will be carried out at County level, in which the tax exemption can be overly complex and impractical .

81. **Retroactive financing**

82. As an exception to Section 4.08 (a) (ii) of the General conditions, an amount that will not exceed 10% of the IFAD financing will be considered as retroactive financing. Eligible expenditures could be pre-financed by the Government from 18 February 2020, and subsequently be reimbursed from IFAD, provided that the Financing Agreement has entered into force and the conditions precedent to withdrawal have been met.
83. Eligible expenditures under retroactive financing are allowed for every disbursement category of the Schedule II of the Financing Agreement, as long as don't exceed the 10% of the IFAD financing.

84. **Programmatic RBL**

85. H2RDP will pilot the Programmatic Results-Based Lending (RBL) on the Sub-component A.3 Promoting Gender-Sensitive Professional Farmer Training. The selected Program will be the "New Professional Farmer Training" implemented at the County level and funded through the Consolidated Poverty Reduction Funds (CPRF). The disbursement under RBL will be conditional to the achievement of agreed and independently verifiable indicators and not depend on evidence of expenditures or transactions.
86. To make sure that funds are used appropriately, an assessment of the borrower country's fiduciary systems has been made as part of the design. The FSA was carried out to ascertain whether the government's fiduciary systems provide reasonable assurance that the financing proceeds will be used for intended purposes and identify the key fiduciary risks that may affect the implementation of the project and the achievement of the outcomes. The fiduciary systems assessment (FSA) mainly focused on those aspects that are to be used for the implementation of the Programmatic RBL Sub-component.
87. The FSA included a risk assessment of the borrower's regulatory framework, fiduciary management capacity, implementation performance of the implementing agencies and key fiduciary risks and proposed mitigation measures.

d. Summary of benefits and economic analysis

88. **Expected benefits:** The project is expected to generate substantial net incremental benefits to an estimated 72,500 households (328,000 individuals), out of which about 17% are formerly registered poor, 50% women, 30% youth, and 30% belong to ethnic minorities both (i.e. direct beneficiaries), and to reach out total 88,000 households (413,000 individuals), including indirect beneficiaries. Specifically, the beneficiaries are expected to register an increase livelihood opportunities in income and physical assets thanks to (i) an increase in agricultural production and productivity, and increased value of agricultural produce (through post-harvesting processing) which results in higher market prices; (ii) increased capacity and opportunities to access market and profits thanks to enhanced linkages (membership, partnerships/agreements, employment) with strengthened lead enterprises and farmer cooperatives, capable to generate higher profits; (iii) improved quality of processed products, thus attracting premium prices at local market; (iv) reduced transportation time and costs and enhanced processing efficiency thanks to improved infrastructures and processing facilities; (v) increased employment opportunities and sources of income thanks to the diversification of (on-farm and off-farm) activities, and increased business opportunities; (vi) enhanced benefits of services of strengthened NEEs/cooperatives to all participating villages; (vii) enhanced social and economic development of women and left behind poor groups due to better access to economic opportunities and climate-proofed infrastructure development; (viii) increased water availability for both human and productive use; (ix) enhanced climate coping and adaptation capacity; and (x) tax revenues as a result of increased volume of taxable production. Increase in income would be largely dependent on farmers/household/rural entrepreneurial groups adopting improved technologies which the programme will promote through technical assistance, development plans and infrastructure investments, thus improving market access, supporting marketing linkages and generally creating a favourable economic environment that encourages farmers/rural entrepreneurs to produce more competitive products.
89. **Environmental benefits:** The project is in addition expected to generate significant environmental benefits, including in terms of carbon sequestration, by promoting fruits tree and perennial crops planting on sloping land and replacing annual crops. These would also enhance organic carbon contents of soil. All village roads will be improved using the existing road alignments and no cutting or excavation of new road alignments will be made. In addition road improvement works include adoption of climate resilient features such as protection of side slopes, construction of cross-drainage structures, side drains, etc. All on-farm water channels will be lined and thus minimising soil and land erosion. Provision of lined drainage canal in the low-lying area in particular where tea is planted ensure safe disposal of floods and minimising damages to land.
90. **Results of financial analysis:** The financial viability of the project has been assessed on the basis of a number of indicative economic activities that could be supported by the project. Three sub-project models were developed: (i) economic entities (business plan enterprises, and women and youth start-up sub-projects; (ii) irrigation and land development sub-projects; and (iii) rural infrastructure sub-projects. Results of the financial analysis show an estimated net present value (NPV) equivalent to CNY 6,012 million, an estimated financial internal rate of return (FIRR) equivalent to 55% . Analysis also includes notional benefits. Details are reported in Annex 4 - Economic and Financial Analysis.

91. **Results of economic analysis:** Project benefits have been estimated over a period of 20 years using a discount rate of 5%. The results of the economic analysis suggest that the project is economically viable, with an economic internal rate of return (EIRR) of 43%, with a net present value (NPV) equivalent to CNY 4,566 million and a benefit-cost ratio of 1.87 (Ref. Annex 4 - Economic and Financial Analysis).
92. **Results of sensitivity analysis:** The results of the sensitivity analysis suggest that the project investments are worthy of sustaining a 47% decline in overall benefits or 87% increases in costs. Even under the extreme scenario of both costs increased by 25% and benefits declined by 25%, the internal rate of return (IRR) of the project remains at 12%, with a net present value equivalent (NPV) to CNY 811 million, and benefit-cost ratio equivalent to 1.12. If benefits are delayed by two years (i.e. in the case project's future production activities take longer to become fully operational) then the IRR declines to 27%, with a NPV equivalent to CNY 3,737 million and a benefit-cost ratio equivalent to 1.72. Details are reported in Annex 4 - Economic and Financial Analysis.
93. **Assessment of the environmental externalities related to carbon emission/sequestration:** The economic analysis includes a tentative assessment of the environmental externalities related to carbon emission/sequestration. As the project has significant in tree and perennial crops and these are replacing annual crops and also planting these crops on sloping land, it is estimated there will be potential environmental benefits in terms of carbon sequestration. In addition, anticipated 21,780 ha of uneven farm land is expected to be brought under land development and terrace construction. Using FAO's EX-ACT software, it is estimated that the project will be responsible for a net emission of approximately 17.2 tons of CO₂ equivalent for biomass and 2.7 for soil per year per ha in the project area.

e. Exit Strategy and Sustainability

94. **Sustainability:** There are several elements in the project that are likely to ensure post-project sustainability of the supported activities and generated benefits:
1. *Economic viability*, as suggested by the results of the economic analysis;
 2. *Alignment with national policies, strategies and priorities:* The project is fully aligned with and embedded in the key policies, strategies and priorities of the country. Mainstreaming smallholders in modern agriculture; revitalizing rural areas, making them economically more attractive and creating new employment opportunities; sustaining poverty achievements and preventing that those that were brought out of poverty fall back into poverty; upgrading and standardizing farmer cooperatives; and promoting environmental sustainability are all important objectives of the government policies and strategies. It is thus expected that the Government will continue to ascertain political commitment towards the project objectives and ensure adequate human and financial resources to ensure that the project achievements are sustained after project completion. It is important to note that the development and up-grading of farmer professional cooperatives into self-standing and self-sustained viable rural economic entities has been and continues to be a central element of the government's poverty reduction and rural development strategy: farmer cooperatives are not seen as a vehicle to implement government programs, but intended to be self-standing, inclusive and growing business entities;
 3. *Institutional sustainability and sustainable partnerships:* The project activities will be implemented by permanent government institutions and/or existing service providers in the project area, which will continue to exist and provide their services after project completion. The project will promote different forms of partnerships (cooperative-investor, enterprise-cooperative, economic entities-service providers, etc.) whereas project (public) financing will be used as a catalyst to forge business relations and start/expand viable business operations;
 4. *Beneficiary ownership and empowerment:* Ownership and commitment of beneficiaries (cooperatives, enterprises, investors, etc.) will be guaranteed through the business plan development and selection process, where agribusiness entities and investors are expected to present their own business ideas, and expected to take a financial risk by mobilizing their own resources, which the project will simply match through co-financing arrangements. Likewise, infrastructure (water and roads) ownership and organization of operation, maintenance and management will be supported prior to any infrastructure investment. Beneficiaries will be adequately empowered, including in collective decision-making, management, etc. through various capacity building activities provided through the project;
 5. *Financial viability:* Financial viability will be one of the criteria for the selection of the business plans to be financed by the project. Business plans would need to include a financial analysis that demonstrates that the investment is financially viable and offers acceptable financial under manageable risk scenarios, convincing marketing arrangements, cost-benefit and cash flow projections and projected break-even forecasts. It is to be noted that the results of the financial analysis of the different productive models that could be supported by the project show positive cash-flows even after the project closure, and reasonable financial returns;
 6. *Moving away from subsidizing production towards responding to market demand:* While it is true that the project operates in marginal and remote areas, with relatively low productivity and high transaction costs, it is nevertheless true that the project avoids building on the conventional 'subsidization' strategy which focused on subsidizing production of predefined commodities, and is promoting a shift towards a more 'market-driven' approach, which focused on market demand, instead [9]. Sustainability of activities supported by the project will thus not depend on subsidies provided through the project, but will be ensured by the capacity of the supported entities to adequately respond to market demands;
 7. *Mainstreaming climate considerations into infrastructure development, and ensure O&M arrangements:* The anticipated effects of climate change will be taken into consideration in the planning and design process of the infrastructures to be supported by the project, and the anticipated impacts of climate change integrated into the technical specification of the infrastructure to mitigate climate risks. The establishment of Water Users Associations and Operation and Maintenance Associations, and the

preparation of O&M plans are pre-conditions to any infrastructure investment supported by the project.

95. **Exit Strategy:** H2RDP aims to pilot measures and approaches that can better contribute to the realization of the Rural Revitalization Strategy of the government. The Rural Revitalization Strategy aims to achieve more appropriate balance of the two-tier Chinese economy and society, by developing the rural areas to equally attractive places as urban areas for rural population to reside, to a status with thriving industry, liveable ecology, civilised ethics, effective governance and better-off livelihood. More details in Annex-10 (Exit Strategy).

1. To achieve that goal, the entry points adopted by H2RDP are:

- Promoting the agricultural resources based industry that can not only augment profitability and added-value but also be more inclusive so that smallholding producers and relative poor households can also be engaged and take advantage to benefit;
- Promoting rural entrepreneurship especially the young and women to seize/diversity income generating opportunities in rural areas for themselves as well as other rural smallholders, at the meantime attract investment to rural area;
- Improving public and collective rural services to enhance the resilience of smallholders and rural businesses as well as efficiency and convenience in perspectives improving rural livelihood.
- Improving rural infrastructure to facilitate agricultural and rural business development

1. The project will be implemented in ten counties of Hunan Province, but it is expected that its approaches and practices if proven successful will inform governments within and beyond the project areas for further replication and scaling up.
2. A sound exit strategy of the project thus would need to demonstrate its considerations in the following dimensions: a) effectiveness and sustainability of project interventions and values during and after project implementation and; b) potential scaling out/up project experiences and lessons to inform government strategies and policies in rural revitalization.
3. In terms of the effectiveness and sustainability of project interventions, the following will contribute to the exit strategy of the project:
4. Alignment and synergy with government strategies and programs to ascertain political commitment and sustainability of resources.
5. Sustained inclusiveness of New Economic Entities and their favorable and lasting partnership with smallholders ascertain continuity of project benefit.

- Stakeholder institutional capacity building, gender transformation and beneficiary empowerment.

1. Robust technical and economic sound business proposals to increase expanded value of production and seize diversified income generating opportunities to explore benefits for all partners.
2. Improved public services to facilitate rural business development and rural livelihood.
3. Finally, the project supported infrastructures shall adopt adequate climate considerations to mitigate risks and be sustained in their functioning through the O&M arrangements introduced by the project.
4. In terms of the sustaining the value of the project for replication and scaling up/out, the following will contribute to the exit strategy of the project:
 - Partnership with government institutions and other partners including UNWomen and private business service providers to share, learn, replicate and scale up effective and innovative ideas and experiences derived from H2RDP. Similar for gender transformation, IFAD can offer related government institutions new approach of interventions to make agriculture and rural sectors more gender equality. There partners will be the key drivers for the knowledge and scaling up agenda of the exit strategy.
 - Building synergy with other interventions of the IFAD country program such as analytical works, technical assistance, impact assessments, policy engagement, south-south cooperation and partnerships to extract and disseminate policy related learning from H2RDP. Interventions will be built in H2RDP to allow a process of knowledge capturing, sharing and policy influence be led by the PPMO to explore scaling up of best practices derived from the project.

3. Risks

H. Project risks and mitigation measures

96. **Project risks:** Annex 9 presents the Integrated Risk Framework (IRF). In general, most of the identified risks (i.e. political and governance, macroeconomic, sector strategies, procurement, stakeholders) have low probability and low impact, except for risks inherent to institutional capacity, which are rated medium, and environmental and social risks, which are rated moderate and are discussed in more details in Section I. Appropriate mitigation measures are identified and reported in Annex 9.
97. **Financial management risks:** Financial management risks are reviewed in the financial section below and in Annex 8 - Project Implementation Manual (PIM). The overall inherent risk is considered medium. Mitigation measures include: recruitment of qualified financial management staff; provision for a separate budget line for the project in the state budget; installing computerized information system and hiring a Chartered Accountancy firm to perform internal audit. Once implemented, the financial management risk will reduce from medium to low.
98. **Institutional capacity risk:** Institutional capacity is considered strong. The PPMO which will implement the project is the same which has implemented the recently completed HARIIP. During implementation, project management was consistently rated 5, performance of M&E was consistently rated 5, financial management 5, environment and natural resource management 5. IOE's

PPE rated Government performance 6.

99. **Possible diversion of Government's counterpart funds to counter the impacts of COVID-19:** On the basis of the experience with the ongoing portfolio, the risk that Government may decide to divert resources allocated to co-finance the projects to counter the impacts of COVID-19 is considered minimal. In none of the ongoing projects in the portfolio in fact the Government has reduced the amount or delayed the provision of its counterpart funds.

100. **5-year implementation period.** Considering the COVID-19 context and the historical low disbursement performance of the China portfolio in the first years of implementation, concerns were raised on whether a 5-year implementation period was considered appropriate. Experience from the ongoing portfolio showed that the impact of Covid-19 on ongoing portfolio has been negligible: in general, project activities have not suffered delays. Furthermore, disbursement rates in China projects are not considered a good indicator of project performance, as the Government tends to pre-finance activities and ask for reimbursement to IFAD at a later stage. In China, projects are 5-year long, and disbursement at completion is, in the majority of the cases, 100%. A five-year implementation period is therefore considered appropriate, even in the context of Covid-19.

101. **How risks related to the potential complexity of results-based lending (RBL) piloting have been assessed and managed:** On the basis of early experience and lessons from the World Bank's Guangxi Poverty Reduction Program for Results, the main risk in implementing an RBL approach relates to insufficient understanding of the approach by the relevant implementers on the ground, and misunderstandings about the need for sufficient upfront budget allocation - which generally causes delays. As a mitigation measure, the proposed project will raise awareness and create enough understanding about the principles of the RBL approach such as prior achievement and independent verification of results before disbursement and the need to advance government funds (e.g. from the consolidated budgets for poverty alleviation) for the achievement of the disbursement-linked indicator. In addition, given the pilot nature of the RBL activity, a relatively small share of the budget is allocated to this activity (i.e. 1.5% of the total budget), in order to reduce the risk of possible low disbursement in case the targets set result too difficult to be achieved, or the incentives provided to the country governments not sufficient to induce them to increase the budget allocated to the New Professional Farmers Development Program from their Consolidated Poverty Reduction Fund (CPRF) budget, or adopt measures to increase the proportion of women and youth participating in the Program. Additional risk mitigation measures include: a strict verification protocol by a third-party independent verification agency which is in charge of verifying and confirming that the disbursement-linked indicator targets set for the sub-component are achieved; audit by external independent national auditors; and IFAD regular supervisions.

102. **Implementation readiness:** Implementation readiness is not considered a major risk (risks of delayed start-up are considered low). Hunan has extensive experience in implementing foreign-funded projects, including IFAD-funded projects (the last one, HARIP, was completed in 2017). Geographical dispersion of project counties is common in internationally-financed project, and does not represent a factor that affects implementation readiness. In order to further mitigate the the risks of start-up delays, provision for retroactive financing is made to the project to finance start-up activities and facilitate prompt execution of the project.

103. **Project risks and mitigation measures**

104. The Transparency International (TI) Corruption Perception Index (CPI) of 2019 for China has improved by seven places (80/180: 2019; 87/180:2018), while its CPI score improved by two points (40: 2019; 39:2018). According to IFAD's Enterprise Risk Management Framework, and the Rural Sector Performance (RSP) rating (2.70), the inherent risk of China is deemed to be Moderate.

105. With the most recent developments in the country, some improvements in accountability and transparency performance of governments can be anticipated. Since the beginning of 2013, the government has embarked on refreshed campaign to fight corruption, promote public fiscal austerity and transparency and conduct a budget reform. The most recent fourth plenary session of the Central Committee of the Communist Party of China in October 2014 further upheld the rule of law, giving the prospect of further improvement in TI rating and scorings.

106. Taking into consideration previous experiences of IFAD-funded projects in Hunan, the Financial Management Assessment was undertaken for H2RDP at the design. In view of this and the proposed mitigation measures the overall project fiduciary risk is assessed to be Moderate at design stage.

Summary	Brief description of issues	Inherent (current) Risk H/S/M/L	Proposed Mitigation Measures	(Future) Residual Risk H/S/M/L
Control Risks				

<p>1. Organization and Staffing</p> <p><i>Risk that the implementing entity does not have the necessary number of adequately qualified and experienced financial management staff in the national and regional centers, resulting in limited ability to meet the functional needs of the project</i></p>	<p>Training for government finance staff is a major constraint that is affecting the accounting reforms and its implementation. Staff from line ministries is also lacking experience with the new procedures.</p>	<p>M</p>	<p>The PPMO organization structure will be composed of a Project Director who has the overall responsibility for the project, and a Finance Manager who has financial responsibility. An Accountant and a Cashier will also staff the finance team of the PPMO. The technical officers in the PPMO will have review and pre-approval functions, similarly at the county PMOs.</p> <p>The finance team of each CPMO will be composed of one Accountant with overall financial responsibility at the county level.</p>	<p>M</p>
<p>2. Budgeting</p> <p><i>Risk that budgeted expenditures are not realistic, not prepared or revised on a timely basis, and not executed in an orderly and predictable manner, resulting in funds not being available when needed, ineligible costs and reallocation of project funds and slow implementation progress</i></p>	<p>Budgets lack details.</p> <p>Much of the expenditure is off the budget.</p> <p>There are gaps between the approved budget and the final execution. Such Discrepancies are for both revenue and spending.</p>	<p>L</p>	<p>The Hunan PPMO, after consultations with project stakeholders, shall prepare its annual budget, linking all the planned activities to the disbursement categories of the Schedule II of the Financing Agreement. This exercise will take place in advance of the preparation of the national budget to ensure that the required Government funds are timely allocated. All financing sources of the project should be clearly stated in a consolidated budget.</p> <p>Counterpart funding will be allocated for the project by province, counties and districts. The government will ensure that counterpart funds are contained in the domestic fiscal allocations for each county and that they are released for the project on time. The counterpart funding will be maintained in the Treasury Accounts of the counties and will be used to pre-finance eligible expenditures of the project as well.</p>	<p>L</p>

<p>3. Funds flow and Disbursement Arrangements</p> <p><i>Risk that funds from multiple financiers disburse with delay due to cumbersome treasury arrangements or inability of project cost centers and service providers to justify prior advances, resulting in delayed implementation</i></p>	<p>The 1994 Budget Law has strengthened the redistributive role played by the Central Government. There are gaps in the control and financial risks at the local level,</p> <p>Analysis of cash and asset position made to government contains significant omissions.</p>	L		L
<p>4. Internal Controls</p> <p><i>Risk that appropriate controls over Project funds are not in place, leading to the inefficient or inappropriate use of project resources.</i></p>	<p>Reconciliation with bank account statements only takes place with the final accounts, after the budget year has closed.</p> <p>New procedures have been introduced (for instance, Procurement and Accounting).</p> <p>The administration, accounting and reporting of the project will be set up in accordance with Circular No. CAIJI (2011)-10: "Provisional Measures for Financial Management of Projects Financed by Loans and Grants from International Financial Organizations" issued in 2011 by the Ministry of Finance.</p>	M	<p>The internal control arrangements for H2RDP should consider: (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) random independent reviews; (e) clear procedures for timely monitoring and financial reporting from the Implementing Agencies of the project. The Provincial PMO shall define the appropriate internal controls in the Financial Management Manual, as part of the PIM.</p>	M
<p>5. Accounting and Financial Reporting</p> <p><i>Risk that accounting systems – including policies and standards – are not integrated and reliable, leading to inaccuracies in financial records and that reasonable records are not prepared, issued and stored, leading to lack of informed decision-making.</i></p>	<p>Government accounting is still under reform to comply with international standards and the accrual basis of accounting.</p> <p>Financial systems only capture and report on the most basic financial data.</p> <p>It is difficult for the central authority to monitor outlays and track the use of intergovernmental fiscal transfers.</p>	M	<p>The project will procure a web-based integrated software to support the core management functions at the central and county levels, such as business plan development, financial management and project monitoring and evaluation. The financial management module of the integrated software will comply with the IPSAS accrual basis of accounting and will have the functionality to report by disbursement category, project component and financing sources at each level of implementation.</p>	M

<p>6. External Audit</p> <p><i>Risk that independent and competent oversight of the Project financial statements is not in place or performed timely leading to possible misrepresentation of the financial results and/or suspension or other remedies due to compliance breaches.</i></p>	<p>The National Audit office (NAO) has strengthened relevant rules, issued standards and provided trainings to improve the professional skills of auditors. Auditing bodies at the local level are not fully effective. The audits are focused more in compliance.</p>	<p>M</p>	<p>H2RDP's annual accounts will be audited by the Hunan Provincial Audit Office (HPAO) on an annual basis in accordance with International Standards on Auditing (ISA) and following the IFAD Handbook for Financial Reporting and Auditing. The audited project financial statements together with the auditor's opinion (following ISA 705) will be submitted to IFAD in English within six months from the end of the fiscal year. The HPAO is constituted as an independent body under the National Audit Office (NAO). The NAO delegates to the Provincial Audit Offices (PAOs) the external audits of provincial donor-funded projects in China. IFAD has previous experience with other PAOs, and these audit arrangements are deemed acceptable to IFAD.</p>	<p>M</p>
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I. Environment and Social category

107. **Environment and social category:** The project is classified as Category B. The potential adverse environmental and social risks are minor, site-specific, reversible and can be managed by known mitigation measures as highlighted in SECAP Review Note (Ref. Annex 5). The project will not involve any large infrastructure schemes, land acquisitions, resettlements, or conversion of forest or other natural or modified habitats. It will not involve any involuntary taking or restriction on the use of land that may result in physical or economic displacement and will not damage or destroy any physical resources of historic, religious or cultural significance. The design mission confirmed that proposed activities did not see any resettlements required. Special attention will be paid to Chinese environmental impact assessment laws and regulations and IFAD's SECAP requirements during project planning and engineering design, to avoid and/or mitigate any major negative environment impacts. Specifically, the following interventions are excluded: (i) large-scale dam/reservoir construction, with more than 15-metre high wall, more than 500-metre long crest, and/or with a reservoir exceeding 3 million m³ capacity or incoming flood of more than 2,000 m³/s; (ii) rehabilitation or development of large-scale irrigation schemes, with command area above 100 ha; (iii) construction of rural roads that entail the total area being cleared above 10 km long, or any farmer with more than 10 % of his/her private land taken; (iv) drainage or correction of natural water bodies (e.g. river training); and (v) significant extraction or diversion/containment of surface water leaving the river flow below 20 per cent environmental flow plus downstream user requirements.
108. The project is expected to contribute positively in addressing the agro-environmental vulnerability of household farming by strengthening capacity for sustainable and integrated modern farming practices through nutrient management and reduce soil erosion and by reducing food waste through improved value chain development. The project would invest in technologies for carbon sequestration and reduce the greenhouse-gases emission from agricultural sources, promote the development of high efficiency irrigation and introduce integrated pest and disease management practices. The overall approach of the project would be based on promoting social cohesion by working with farmer groups and help them realize economies of scale.
109. The increased production can potentially increase pollution from pesticides and increase pressure on land resources against which farmers will be trained in integrated-pest management and soil fertility management. All these possible impacts are reversible in nature and can be readily remedied by appropriate preventive actions and/or mitigation measures as outlined in the ESMP (Ref. PIM, Chapter 9). Support to NEEs and Women & Youth Start-ups for rural transformation has risks of elite capture and limited economic inclusion and benefits generated for poor and vulnerable households, women and youth. It is at the core of the design to support a pro-poor and inclusive development and implementation of these models and monitor the results (Ref. component A).
110. The project will apply free, prior, informed consensus whenever ethnic minorities' traditional institutions exist, and ensure that ethnic minorities' cultural heritage will be respected as per IFAD's IPs Policy.

J. Climate Risk classification

111. **Climate risk classification:** The potential climate risk of this project is classified as "moderate". In SECAP Review Note (Ref. Annex 5) the hazards of drought, rainfall, flood, high temperature and low temperature events from 2021 to 2050 under RCP 8.5 scenario are evaluated. The vulnerabilities of target counties in Hunan province are also evaluated, which include the basic factors of population, economy, agriculture, income, infrastructure, education and so on. Based on the classifications of hazard evaluation and vulnerability evaluation, risk assessment model reveals the three key climate trends that may have a potential impact in the project area are: (i) Changes in rainfalls quantity and intensity: Decrease in rainfalls may affect the viability of rain-fed agriculture in the absence of irrigation or water harvesting technologies; Increase in rainfalls, may increase the likelihood of floods. Shorter but more intense rainy seasons may increase flood risks;(ii) Changes in rainfall patterns: Changes in the seasonality of the rainy seasons, particularly delays in the onset of the rainy season, may increase the risks of droughts and have detrimental consequences for the agricultural production; (iii) Increases in temperatures: Higher temperatures in the dry season may increase the magnitude of dry spells and droughts. The project will finance a series of hard and soft investments (i.e. climate-proofed infrastructures, institutional strengthening, and technical assistance) aimed at reducing the risks and the negative impacts associated to the changing of weather and climate conditions, and promote climate-resilient production (e.g. Improving climate-risk assessment, planning and decision-making, and Piloting climate-smart irrigation investments - Ref. Component B). To further reduce the potential negative impacts of climate change on the project investments, the project would adopt adaptation measures, e.g. (i) the project will refrain from investments in headworks (i.e. intake weirs), which are prone to flood damage; (ii) all physical infrastructures, and particularly on-farm irrigation works and rural roads, will be climate-proofed. As most of the infrastructures financed by the project will be relatively small infrastructures, climate-proofing will be largely achieved by the implementation of good management, operation, and maintenance practices. Potential climate risks related to the project investments are mostly linked to changing rainfall patterns and rising temperature, which in turn may lead to (i) landslides on steep hillsides, (ii) flash floods and water logging in lowlands, and (iii) droughts and extreme hot spells.

4. Implementation

K. Organizational Framework

a. Project management and coordination

112. **Lead implementing Agency:** The Provincial Department of Agriculture and Rural Affairs (DARA) has been appointed as lead implementing agency. Specifically, the Hunan Agricultural Foreign Economic Cooperation Center within DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO)*. Additional support will be mobilized from the Office of Rural Revitalization, Divisions of Cooperative Economy and other divisions of DARA whenever needed. The PPMO will not be using IFAD loan to carry out its functions: it will mobilize adequate budgetary resources from the government budget to carry out its overall management responsibilities.
113. (*) Institutional capacity of the PPMO is considered strong. The PPMO which will implement the project is the same which has implemented the recently completed HARIIP. During implementation, project management was consistently rated 5, performance of M&E was consistently rated 5, financial management 5, environment and natural resource management 5. IOE's PPE rated Government performance 6.
114. **Prefecture and County Project Management Offices:** Major implementation responsibilities of the project lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs, and adequately staffed - including through the acquisition of capacity and services from the market. Relevant technical bureaus in the counties (such as water conservancy, meteorological, transportation bureaus, etc.) will be mobilized to support the project implementation in the related activities of the project as per need. The Women Federation (WF) and Youth League (YL) in the counties will be also be assigned responsibilities in undertaking women and youth related activities designed for the project. The Chairperson of county Women Federation will be assigned the role of deputy project director at the county CPMO, with a specific role in overseeing the gender related aspects and activities of the project, and facilitating gender transformation in the project context. Prefecture PMOs at Xiangxi and Shaoyang will be established to provide oversight to project implementation in their respective counties. Similarly as the PPMO, the Prefecture PMO will secure required resources from the government to discharge its supervisory duties.
115. **Department/Bureaus of Finance:** The Department/Bureau of Finance at Provincial/County level and at Xiangxi Prefecture and Shaoyang City will be responsible for administering programme resources, including the IFAD loan and counterpart funds.
116. **Implementing Support Units:** Implementing Support Units will be established in the project townships to facilitate project implementation, targeting and related monitoring activities.
117. **Village Implementation Groups:** (VIGs) will be established in the project supported villages to mobilize participation of farmers in the project such as in the consultative process of developing business partnership with agro-entities; oversee public rural infrastructure construction and maintenance; promote project prioritization to women and youth, etc.
118. **Provincial Coordination Committee:** A coordinating committee comprising at least the Provincial Department of Finance (DOF), the Provincial Department of Agriculture and Rural Affairs (DARA), the Provincial Development and Reform Commission (PDRC), and the Provincial Office of Poverty Alleviation is foreseen to provide overall guidance and coordination of the project implementation. The Committee can be mobilized as per need.
119. **Project Leading Group:** At county level, a Project Leading Group will be established to be chaired by the executive county governor, comprising at least the County Bureaus of Finance (BOF), Agriculture and Rural Affairs (CARA), and Poverty

Alleviation Office, Women Federation etc. The Project Leading Group will provide overall guidance and coordination of the project implementation.

120. **Monitoring and Information System:** A management information system (MIS) which will be specifically developed for the project, and that will integrate information regarding project management, financial management and physical progress, allowing real-time monitoring, evaluation and reporting, will be established to support the core project management functions at the provincial and county levels.
121. **Partnership with Women Federation and Youth Leagues:** The Women Federation (WF) and Youth League (YL) in the counties will be also be assigned responsibilities in undertaking women and youth related activities designed for the project. The Chairperson of county Women Federation will be assigned the role of deputy project director at the county CPMO, with a specific role in overseeing the gender related aspects and activities of the project, and facilitating gender transformation in the project context. As far as the responsibilities of the Youth League are concerned, these include mobilisation of youth participation, facilitation of youth employment and business development activities and services, participation in project M&E and sharing related experience of youth development from and for the project.
122. **Partnerships with UNWomen and China Yenching China Social Entrepreneur Foundation to promote women empowerment and youth development:** A partnership with UNWomen is established to support project design and implementation. Specifically, UN Women will contribute to the design of the project (i.e. by contributing with some analysis, design surveys, etc.) and to the implementation of the project (i.e. by designing, organizing and conducting specific trainings, etc.) to promote women capacity and economic empowerment in the project area. In addition, China Yenching China Social Entrepreneur Foundation has indicated its interest to collaborate with the project to jointly pursue rural youth development in the project area.
123. **Partnership with the Agricultural Information Institute of the Chinese Academy of Agricultural Science:** IFAD and the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (All-CAAS) are entering into an agreement by which CAAS will provide support to IFAD in monitoring and evaluating the IFAD portfolio in China, extracting relevant knowledge from IFAD portfolio, and utilizing it to inform policy making. Within this context, the project would also enter into an agreement with All-CAAS for carrying out major functions related to M&E, knowledge management and policy dialogue, i.e. carrying out baseline, midline, and endline surveys, analysis of data, impact evaluations, policy notes, etc.
124. **Business Service Centers:** The Business Service Centers that will be established by the project could eventually be assigned with certain functions and duties in supporting business plan development and implementation support, training and other capacity building activities and services (This would however need to be decided on case by case basis in the counties, subject to the capacity and performance of these centers).
125. **Independent third-party Verification Agency:** An independent third-party verification agency will be contracted by the project to verify that the disbursement-linked indicator targets set for the sub-component that would pilot the program result based lending approach (A.3. - Promoting Gender Sensitive Professional Farmer Training program) (i.e. increased number of farmers completing the training program; increased percentage of women completing the program; and reduced age of the trainees completing the program). Confirmation that the disbursement-linked indicators (DLI) target has been achieved would be through a letter of confirmation to IFAD. The required characteristics of the third-party verification agency are:
 1. 'Independency' from the implementing agency and government influences. Functions can be carried out by various entities, for instance academia and research institutions, the private sector (e.g. consultancy and/or auditing firms), non-governmental agencies – including independent government agencies, such as audit offices, bureaus of statistics, etc.;
 2. 'Experience' and 'credibility': the verification agency must be technically competent to measure, assess and verify if the pre-defined targets in the DLI are achieved.
126. **Verification protocol:** The PPMO will record the information on the basis of reports submitted by the county PMOs on a semi-annual basis, and be responsible for the accuracy of the information. Data will be reported to a third-party Verification Agency (VA) for verification. The independent third-party Verification Agency will conduct a verification of the achievement of the three disbursed-linked indicators following the following protocol: relevant training documents from two randomly selected counties will be reviewed every disbursement period (e.g. semi-annually). In each randomly selected county, the VA will randomly select 20% of the reported trainees having successfully completed the program, checking gender and age - among other information - to confirm the DLI disbursement value. These information will be also monitored routinely by IFAD during supervision missions. Confirmation that the disbursement-linked indicators (DLI) target has been achieved would be through a letter of confirmation to be forwarded to IFAD on a semi-annual basis and supported by the corresponding list of trainees certified by the VA.
127. **Role of MARA:** In order to facilitate the possible scaling up of successful innovations promoted through the project beyond Hunan province, and inform national policies, DARA is invited to strengthen the linkages with the Ministry of Agriculture and Rural Affairs (MARA). A budget for policy activities under Component C has been included to favour and provide sufficient resources to implement activities aimed - among alia - to this purpose.
128. **Leveraging existing development partners' platforms:** Existing platforms with other developing partners, for instance the UN technical working group on agriculture, the IPRCC-ADB-FAO-IFAD-UNDP-WB-WFP collaboration on poverty reduction and south-south cooperation, will be leveraged and mobilized to maximize the opportunities for policy dialogue and engagement.
129. **Procurement.** Procurement of goods, works and services financed by the project will be carried out in accordance with the Government of China National Procurement Guidelines supplemented by the implementation manuals and any subsequent amendments to the extent such are consistent with IFAD Procurement Guidelines, IFAD Procurement Handbook and its subsequent. he procurement methods to be applied, prior review arrangements, and the thresholds for different procurement methods will depend on the expenditure and the estimated value of the contract, and will be detailed in the letter to the borrower.

b. Financial Management, Procurement and Governance

130. Financial Management

131. H2RDP will benefit from the previous IFAD funded projects in Hunan, namely the Wulin Mountains MADP and HARIIP, both closed on 2007 and 2018 respectively. Based on these previous experience to avoid delays are at start-up the project will ensure that: (a) qualified finance staff be appointed at each PMOs; (b) PIM and FMM be properly prepared, translated and distributed to all PMOs; (c) an accounting software in compliance with international standards be procured (d) retroactive financing will be used to speed up the initial activities (e) continued capacity building for staff at the implementing agencies be conducted at an early phase.

132. Organization and staffing

133. The PMOs will be staffed with experienced and qualified officers in project management, financial management and procurement. They will also be assisted by officers from the technical line bureaus at each corresponding level. The PPMO and CPMOs will be in charge of the day-to-day management of project activities, overseeing the implementation and supervising the financial progress.

134. The PPMO organization structure will be composed of a Project Director who has the overall responsibility for the project, and a Finance Manager who has financial responsibility. An Accountant and a Cashier will also staff the finance team of the PPMO. The technical officers in the PPMO will have review and pre-approval functions, similarly at the county PMOs.

135. The finance team of each CPMO will be composed of one Accountant with overall financial responsibility at the county level.

136. Budgeting

137. China has undertaken extensive reforms to its budgeting system over the past ten years. These have encompassed the entire budgeting cycle: formulation, approval, implementation and audit. Under its budgeting system, provincial, and local government, all activities of the government are predetermined and are set out in plans and programs.

138. The Hunan PPMO, after consultations with project stakeholders, shall prepare its annual budget, linking all the planned activities to the disbursement categories of the Schedule II of the Financing Agreement. This exercise will take place in advance of the preparation of the national budget to ensure that the required Government funds are timely allocated. All financing sources of the project should be clearly stated in a consolidated budget.

139. Counterpart funding will be allocated for the project by province, counties and districts. The government will ensure that counterpart funds are contained in the domestic fiscal allocations for each county and that they are released for the project on time. The counterpart funding will be maintained in the Treasury Accounts of the counties and will be used to pre-finance eligible expenditures of the project as well.

140. Internal controls

141. The internal control arrangements for H2RDP should consider: (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) random independent reviews; (e) clear procedures for timely monitoring and financial reporting from the Implementing Agencies of the project. The Provincial PMO shall define the appropriate internal controls in the Financial Management Manual, as part of the PIM.

142. In the case of H2RDP it is expected that for each payment sufficient reviews and checks and oversight will be carried out by the Internal Audit and Finance Bureaus.

143. Central level government agencies are active in identifying counties to be randomly inspected and reviewed. Audit findings are followed up during subsequent reviews, and disciplinary actions taken in more serious cases.

144. Inspection/Internal audit work however is primarily of a compliance nature.

145. Accounting and Financial Reporting

146. The project will procure a web-based integrated software to support the core management functions at the central and county levels, such as business plan development, financial management and project monitoring and evaluation. The financial management module of the integrated software will comply with the IPSAS accrual basis of accounting and will have the functionality to report by disbursement category, project component and financing sources at each level of implementation.

147. The Hunan PPMO will be responsible for the consolidation of the financial information produced in each county. The project will maintain separate accounts or ledgers at every level of implementation and for each financier to be able to generate independent financial information.

148. External Audit

149. H2RDP's annual accounts will be audited by the Hunan Provincial Audit Office (HPAO) on an annual basis in accordance with International Standards on Auditing (ISA) and following the IFAD Handbook for Financial Reporting and Auditing. The audited project financial statements together with the auditor's opinion (following ISA 705) will be submitted to IFAD in English within six months from the end of the fiscal year. The HPAO is constituted as an independent body under the National Audit Office (NAO). The NAO delegates to the Provincial Audit Offices (PAOs) the external audits of provincial donor-funded projects in China. IFAD

has previous experience with other PAOs, and these audit arrangements are deemed acceptable to IFAD.

150. The objective of H2RDP's annual audit is to enable the auditor to express an opinion on whether H2RDP's financial statements present fairly, in all material respects, its financial position at the end of the fiscal year, and if the results of its operations and cash flow are in conformity with the accounting standards applied by H2RDP. Compliance with financial reporting, auditing requirements and performance of the auditor will be monitored regularly and during supervision missions.

151. IFAD promotes public disclosure of projects financial information to enhance transparency and accountability. IFAD will disclose H2RDP's audit reports, as appropriate, in line with the IFAD's disclosure policy. Management Letters issued by auditors are not subject to public disclosure by IFAD.

152.

Governance and Anti-corruption measures

153. In accordance with provisions of the IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations, IFAD applies a zero-tolerance policy with regard to any fraudulent, corrupt, collusive or coercive actions in the projects it finances. This entails not only pursuing all allegations of fraudulent practices and applying appropriate sanctions but also promoting preventive control measures such as assessments of national and project-specific FM, auditing and procurement systems during the project design phase.

154. Where it is determined that fraudulent, corrupt, collusive or coercive practices have occurred in projects financed through its loans and grants, IFAD applies a range of sanctions, including disciplinary measures for concerned staff; and pursues the recovery of any losses in accordance with the provisions of the applicable IFAD rules and regulations and legal instruments.

155. The Policy on Preventing Fraud and Corruption has been integrated into IFAD's legal framework (Project Procurement Guidelines, General Conditions for Agricultural Development Financing, IFAD's Code of Conduct) and applies to all recipients of IFAD financing.

156. Measures which shall form part of the framework for transparency include:

1. Publication of sourcing, tendering and contracting processes at PPMOs & CPMOs offices;
2. Participation of representatives of end-users in bid assessments;
3. Prompt communication to bidders of bid evaluation outcomes;
4. An internal code of conduct to be signed by all Project staff;
5. A code of business ethics, to be included in all agreements/contracts signed with partners and beneficiaries of H2RDP activities. The code of conduct and the code of business ethics will be included in the Project Implementation Manual after due discussion with implementation partners;
6. Annual project audits;
7. IFAD's direct supervision which inter alia will address fiduciary compliance;
8. Involvement of Project stakeholders (and especially farmers and their organisations) in programming, implementation and M&E of H2RDP activities;
9. Evaluation and impact assessment outsourced to independent institutions.

157. Programmatic RBL

158. The main objective of the Fiduciary Systems Assessment (FSA) was to confirm whether the legal framework and institutional mechanisms enable the Borrower and the Lead Implementing Agency to abide by the IFAD Policy on Preventing Fraud and Corruption.

159. The government has established different controls at different levels (county line bureaus, township government, procurement agent companies, public resources transaction centers) for combating fraud and corruption. These agencies are empowered to prevent, report, detect, investigate and prosecute to sanction. These controls are exercised by representatives of the Discipline Inspection commissions, the Ministry of Supervision and the anti-corruption bureaus located at the procuratorates at every government level.

160. Moreover, all the Implementing Agencies (IAs) involved in procurement are subject to yearly external independent audits. All IAs have comprehensive mandate to combat fraud and corruption while carrying out procurement. In addition, any bidder or any party can report fraud and corruption issues to any of these government agencies. There is a risk that IFAD may not be informed of any credible and material allegations of fraud and corruption issues during the implementation of the program. Thus, specific mitigation measures are proposed in the action plan.

161. **Implementation of a result-based lending approach - on a pilot basis:** The project will be implemented piloting a result-based lending (RBL) approach - and, specifically, the 'hybrid' model (i.e. an operation with both programmatic RBL components and traditional investment project components) - as the disbursement of one of the sub-components (i.e. Sub-component A.3) will be triggered by the achievement of agreed and independently verifiable targets or milestones that are considered important towards contributing to the achievement of the project objectives* - following the verification protocol described in Section 4.K - Organizational Framework.

162. (*) The rationale for selecting the Farmers' Training component for RBL piloting is explained in the Theory of Change section.

Other activities for piloting the RBL approach were considered (e.g. investments in climate smart infrastructures) and rejected due to the technical complexity of assessing the baseline and defining clear and objectively verifiable DLIs. The Farmers' training program is implemented under a clearly defined government program. Its contents and outcomes are clearly described. The DLIs and the targets could therefore be easily communicated with the client. This was a very safe choice.

- **Cost-efficiency:** The agreed amount would be less than the actual training costs, but enough to provide a sufficiently attractive incentive for the counties to up-scale the program, increase the percentage of women beneficiaries, and encourage youth to attend.
- **Scale of the sub-component -value-added and risk mitigation strategy:** The disbursement against results will be piloted on a small scale by the project: the budget allocated to Sub-component A.3 is US\$ 2.6 million, i.e. 1.5% of the total project budget, and 4.3% of IFAD financing. The value of this sub-component does not lie in its scale, but on its innovation and learning potential. This is the first time an IFAD-funded operation will disburse against results, and not against expenditures. This would in addition reduce the risk of possible low disbursement in case the targets set result too difficult to be achieved, or the incentives provided to the country governments not sufficient to induce an improvement in the New Professional Farmers Development Program.

163. The RBL sub-component will build on the use of government systems. The Fiduciary Assessment provided reasonable assurances of the existence of an adequate policy, regulatory and institutional framework to rely on country systems for the implementation of the RBL sub-component.

- **Flow of funds:** IFAD financing will be channelled to the provincial treasury (through the project designated account) and be pooled with other public funds into the "Consolidated Poverty Reduction Fund". This facilitates potential scaling up of project introduced value to the New Professional Farmers Development Program.
- **Disbursement:** Disbursement will be triggered by the achievement of agreed and independently verifiable targets (i.e. DLIs), as confirmed by an independent third-party verification agency, not by documented eligible expenditures. IFAD disbursement will be triggered semi-annually by a letter of confirmation from DARA supported by the Verification Agency report (Ref. Verification Protocol). The three DLIs are independent (non-achievement of one of the indicators would not compromise disbursement on the other indicators). DLIs can be partially- or over-achieved: in the scenario of over-achievement in the targets on a specific semester, the disbursement will proceed based on the actual achievement. If the overachievement is recurrent, it could exhaust the total IFAD Financing earlier than envisaged, in this case, the RBL will be terminated when the total IFAD financing is exhausted. In the scenario of underachievement in the targets on a specific semester, the disbursement will be based on the report made by DARA, and the balance remaining for that semester will be transferred to the next one. The total IFAD financing will be maintained as a ceiling. Supervision for the RBL sub-component would shift the focus from expenditure traceability to monitoring of results (i.e. compliance with DLIs).
- **Audit and ineligibility of expenditures:** External independent national auditors (i.e. the Hunan Provincial Audit Office) will audit the operation, including the RBL sub-component. As far as the RBL sub-component is concerned, the HPAO will carry out an audit of the NPFTP following the IFAD Handbook for Financial Reporting and Auditing, but without the traceability of IFAD funds. It is proposed that the Audit will provide one Management Letter with two sections: one for the investment project, and another one for the RBL sub-component (i.e. for the NPFTP). The Audit Report will reflect two audit opinions: one for the investment project, and another one for the RBL sub-component (i.e. for the NPFTP), but without the need to identify the IFAD Financing. In case of ineligibility of expenditures under the RBL sub-component, unless it can be directly attributed to a different funding source than IFAD, the IFAD funds will be subject to ineligibility based on a percentage basis.
- **Procurement:** Procurement will follow government procedures. No major risks identified. Given the nature of the RBL sub-component (i.e. training), it is anticipated there will be minimal small value procurement under the sub-component, which will be mainly be training cost of participants (e.g. funding participants' travel costs, accommodation and subsistence, etc.) and few other administrative activities which will be subject to Government's overall audit.
- **Frauds and corruption:** Prevention of frauds and corruption will follow the legal and institutional framework described in the section above, i.e. at different level, county line bureaus, township government, procurement agent companies, public resources transaction centers are empowered to prevent, investigate, detect, report, and prosecute to sanction frauds and corruption. Controls are exercised by representatives of the Discipline Inspection commissions, the Ministry of Supervision and the anti-corruption bureaus located at every government level. In line with China's policy on transparency (Management Regulations for Foreign Financed Projects, 2017), which is applied on all donors' funded projects, the Government's obligation to inform IFAD in case of corruption and to inform IFAD on the results of the investigation applies to the RBL component as well.
- **IFAD supervision:** Supervision for the RBL sub-component would shift the focus from expenditure traceability to monitoring of results (i.e. compliance with DLIs).
- **Expected exceptions to the General Conditions:** The following exceptions to the General Conditions are expected to be adopted to implement subcomponent A.3: (a) Disbursement will be triggered by the achievement of agreed and independently verifiable targets; and (b) IFAD will not maintain the right to directly investigate allegations of fraud and corruption in the subcomponent. The Government however has the obligation to inform IFAD of alleged cases of fraud or corruption, and to inform IFAD on the results of the investigation.

164. A **Technical Assessment** of the New Professional Farmers Development Program that the RBL sub-component intends to support to describe the program, the challenges that the project intends to address and the opportunities that it intends to leverage on, the relevant institutional and implementation arrangements, disbursement conditions, monitoring, evaluation and verification protocol, etc. has been conducted (Ref. Annex 12 - Technical Assessment).

165. Finally, an **Environment and Social Systems Assessment** has also been carried out to understand the social, environment and climate risks and impacts likely to be generated from implementing sub-component A.3 (Ref. Annex 5 - SECAP, and Annex 13 - Environmental and Social System Assessment (ESSA) for Sub-component A.3). The assessment confirmed (a) that the environmental and social risk classification of the project activity under the Programmatic RBL is C; (b) that the interventions proposed under the sub-component will not impact natural habitats and physical cultural resources, will not generate any adverse social, environmental and climate risks and impacts, and will not involve any land acquisition; and (c) that the sub-component will yield significant social benefits to the local community members or farmers where the program will be implemented, and that by aiming at increasing the number of women participating and reducing the vulnerability of farmers to climate related shocks and distress from crop failure, the sub-components intends to lower any likelihood of social conflict or unrest. The Assessment also confirmed the existence of an appropriate legal, regulatory and institutional framework for managing environmental and social risks and impacts, at both the national and county levels.
166. **Supervision, Mid-term Review and Completion plans:** The project will be under the direct supervision of IFAD. In order to facilitate the project's implementation and ensure the achievement of project objectives, IFAD and the Government will perform project supervisions/reviews that include (at least one) annual supervision, mid-term review, and completion review. Additional, specific implementation support missions to deal with specific implementation issues can be organized as per need.
1. **Annual supervision:** Annual supervision will be conducted by supervision missions sent by IFAD, and to the extent possible jointly with the Government. The missions will review the progress of program implementation, both physically and financially; implementation performance; fiduciary aspects, results, impact and sustainability. Recommendations to issues raised, if any, will be made by the mission to improve the program implementation. For the first supervision of the program, the focuses will be on reviewing adherence to the programme strategies and institutional performance, including implementation arrangements, targeting, appropriateness of procurement, functioning of the M&E system, and effectiveness of financial management.
 2. **Mid-term review:** IFAD and the Government will jointly carry out a "mid-term review" (MTR). Among other things, the MTR mission will review the project approaches and strategies including the effectiveness of targeting and gender mainstreaming strategies, implementation modalities, poverty and gender focuses, impact of individual intervention, and sustainability. The mission will recommend a scaling-up or reorientation as may be required to achieve project objectives and remove eventual constraints. Recommendations from the MTR may result in modifications to the Loan Documents.
 3. **Completion review:** Completion review, also jointly conducted by IFAD and the Government, will evaluate, among other things, the results and impact of the program, review sustainability and exit arrangement, and draw experiences and lessons for later IFAD and government supported projects.

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

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

167. **Planning:** Planning will follow current practices for the IFAD-funded projects in China: planning will be done on annual basis through the development of annual work plan and budgets (AWPBs). AWPBs will be developed through participatory approach. AWPBs would include, among other things, a detailed description of the planned activities and required budget, a procurement plan, and a plan for the implementation of the activities. AWPBs would need to receive IFAD's "no objection".
168. **Monitoring and evaluation (M&E):** Monitoring and evaluation is an essential function that would support project management. M&E will be supported by a management information system (MIS) which will be specifically developed for the project, and that will integrate information regarding project management, financial management and physical progress, allowing real-time reporting.
169. **Pro-WEAI survey and use of Washington Group on Disability Statistics:** As part of its commitment to being gender transformative, a pro-WEAI survey will be undertaken at baseline and completion. The pro-WEAI survey will assess the increase in the participating women's agency and empowerment. Aspects of pro-WEAI will also be included in the Core Indicator Outcome Indicator Survey, particularly with regard to asset management and productivity. With regard to people with disabilities, it is recommended to use the Washington Group on Disability Statistics.
170. **Learning and knowledge management (KM):** The project knowledge management strategy would be built on the following key elements: (i) an effective M&E framework will be established to monitor implementation progress, and would provide the evidence for learning; (ii) a baseline, mid-line, and endline survey* will be conducted at the beginning, mid-term, and completion of the project; (iii) workshops at different levels will be held regularly to share knowledge, experiences, innovations, and best practices; (iv) study tours, exposure and exchange visits, both in the country and outside the country will be encouraged as a vehicle for sharing knowledge; (v) an agreement with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) will be signed for the provision of support in M&E, and knowledge management.
171. (*) Baseline, mid-term and endline surveys intend to measure outcome-level indicators in accordance with the COI Measurement Guidelines.

b. Innovation and scaling up

172. **Innovations:** One of the main objectives of the project is to introduce, test, pilot, and demonstrate innovative models, approaches, mechanisms, that - if successful - could be replicated and scaled-up, inform policy-making - or shared with other

developing countries through south-south cooperation [9]. It is important to clarify that, in the context of this project, the term 'innovative' is used to describe a model, approach or mechanism that is different from the 'mainstreamed' approach. This definition reflects the Government's understanding and expectations. Some of the elements described below can be considered truly 'innovative' in the country, provincial or project area's context. Others may not be completely new in the country context, but their adoption may have been limited and their implementation may have encountered challenges that the Government is interested to understand and overcome. Anticipated innovations include:

1. **Inclusive rural business development models:** The project would provide investment support for rural businesses (new and existing), which demonstrate viable and inclusive business models featured by genuine vulnerable households' participation and fair benefit sharing arrangements. Professional farmer cooperatives would be the primary focus, but other new economic entities will also be targeted by the project.
 2. **Business incubation centers:** The project will support the setting-up and operationalization of business incubation centers, platforms to support entrepreneurship programs and business start-up (Ref. Sub-component A.2).
 3. **Climate proofed design of infrastructure:** The project will support the improvement of the capacity to assess climate-risks, and plan and make investment decisions accordingly, and the integration of climate considerations into the design and technical specification of the infrastructures, to reduce their vulnerability to the anticipated impacts of climate change (Ref. Component B).
 4. **Disbursement against results:** The project will introduce on a pilot basis an innovative mechanism for disbursement, i.e. disbursing project funds allocated for a sub-set of activities (Ref. Sub-component A.3) against the achievement of agreed and independently verifiable targets or milestones that are considered important towards contributing to the achievement of the project objectives. The achievements of the agreed targets or milestones, or disbursement linked indicators (DLIs), will be verified by an assigned independent agency following agreed verification protocols. The disbursement against results will be piloted on a small scale by the project, and replication at a larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation.
173. **Policy engagement and scaling-up:** Policy engagement is a key strategic thrust of IFAD-China partnership, as highlighted in the COSOP 2016-2025. Policy engagement is a long-term process, which is pursued through a combination of different instruments: lending (e.g. investment project) and non-lending (e.g. dialogue, partnerships, analytical works, etc.). Within this framework, the project will contribute to the policy and scaling-up agendas as follows: the project is conceived as a 'demonstration' project, which will introduce several innovative approaches to test their applicability in the project area's context, learn lessons, and induce replication of those models and approaches that demonstrate themselves successful and/or inform policy-making. The policy engagement and scaling-up framework relies on the following elements:
1. **Champions:** The project will closely engage national and provincial stakeholders as champions to learn and replicate ideas and experiences derived from the project. Central level agencies such as the Ministry of Finance, (MOF) the National Reform and Development Commission (NDRC), and the Leading Group Office of Poverty Alleviation and Development (LGOP) place great expectations on the capacity of IFAD-funded projects to introduce innovations and good practices that can be replicated or inform policy-making, and will closely observe the progress and results of the project. The Ministry of Agriculture and Rural Affairs (MARA) has a special interest on a number of features in the project, that may inform its policies and programs, including promoting new economic entities and inclusive rural business development models, rural entrepreneurship program, the new professional farmers development program, etc.
 2. **Drivers:** There is a mix of (i) market forces associated to the growing demand for safe and high quality food; and (ii) genuine policy interest from the government, particularly from the Ministry of Agriculture and Rural Affairs (MARA), in observing how some of its policies and strategies can be best operationalized or adjusted, including ensuring long-term sustainability of poverty achievements, mainstreaming smallholder farmers into modern agriculture, revitalizing and creating new employment opportunities in rural areas, promoting new economic entities and inclusive rural business development models, among other policies and strategies;
 3. **Pathway:** The pathway for policy engagement and scaling-up would include the following steps: (i) regular monitoring of project progress and results through the project M&E system, supported by a management information system (MIS) that would allow real-time reporting, which will provide evidence for learning; (ii) learning and stocktaking of lessons and best practices, including through possible research/analytical works, impact assessments, etc. - this function will be supported by the Agricultural Information Institute of the China Academy of Agricultural Science (AII-CAAS), with which the project would enter into an agreement; (iii) workshops, seminars and other learning events at different levels will be held regularly to share knowledge, experiences, innovations, and best practices and inform policy-makers, including the IFAD Annual Portfolio Review, consultations in the framework of the design and/or evaluation of the COSOP, regular policy seminars organized by IFAD to share experience from its projects with various stakeholders, etc. AII-CAAS is expected to play a critical role to disseminate relevant lessons from the project and inform policy-making; (iv) joint field-visits with relevant stakeholders and policy-makers to showcase lessons and best practices; (v) regular interaction with other projects to share lessons and best practices;
 4. **Possible scaling-up directions:** Possible scaling-up could happen through (i) expanding services to more clients in a given geographical space; (ii) horizontal replication, from one geographical area to another; (iii) functional expansion, by adding additional areas of engagement; and (iv) vertical expansion, moving from a local or provincial engagement to a nation-wide engagement;
 5. **Provisions:** Adequate budget is provided for project M&E and knowledge management, and to undertake the necessary advocacy and policy activities;

6. *IFAD's role*: IFAD will support and facilitate the process, by providing the necessary expertise, contributing to the monitoring of the results and to the knowledge management, and leveraging its own partnerships and platforms that will catalyze the scaling-up process. However, the policy engagement and scaling-up strategy of the project will primarily rely on and will be delivered through the government systems - not by IFAD.

M. Implementation plans

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

174. **Key steps towards project approval and project start-up**: The following are the key milestones between the end of project design and project start-up:

- **IFAD - Design Review Meeting:** 23 September 2020
- **IFAD - Quality Assurance Group Review:** 1-7 October 2020 (tentative)
- **IFAD - Submission of IFAD Project Design Report to SEC:** 12 October 2020
- **Government - Submission Feasibility Study to PDRC and Foreign Capital Use Report to MOF for approval:** October 2020 (expected)
- **Government - NDRC approval and MOF authorization to negotiate:** November 2020 (expected)
- **Loans negotiations:** 30 November - 4 December 2020 (tentative)
- **IFAD Executive Board approval:** 7-9 December 2020
- **Signing financing agreement:** January 2021 (expected)
- **Establishment of PMOs and appointment of project staff:** March/April 2021 (tentative)
- **Implementation support mission:** April 2021 (tentative)
- **Opening designated account:** May 2021 (tentative)
- **Start-up:** June 2021 (tentative)

175. **Retroactive financing**: To mitigate the the risks of start-up delays and facilitate prompt execution of the project, provision for retroactive financing is made to the project. Conditional to the approval of the IFAD Executive Board, IFAD will reimburse eligible project expenditures incurred by the borrower before the loan effectiveness to finance the start-up preparation activities up to a maximum of 10% of the total IFAD financing (i.e. US\$ 6 million). Retroactive expenditures are pre-financed by the borrower.

176. **Stakeholder consultations and feedback**: An indicative list of the stakeholders that have been consulted during the design process, and views captured in the project design, include: Hunan Department of Agriculture and Rural Affairs, Hunan Province; Hunan Women's Federation, Hunan Province; Hunan Youth League, Hunan Province; Hunan Poverty Alleviation Office, Hunan Province; Shimen Bureau of Agriculture and Rural Development, Shimen County; Shimen Water Conservancy Bureau, Shimen County; Shimen Transportation Bureau, Shimen County; Taoyuan Water Conservancy Bureau, Shimen County; Taoyuan Transportation Bureau, Shimen County; Taoyuan Bureau of Agriculture and Rural Development, Shimen County; Shimen Maternity and Child Care Center, Shimen County; Shimen Youth League, Shimen County; Taoyuan Women's Federation, Shimen County; Xiushan village and Village committees and professional cooperatives, Xiuping township, Shimen County; Zhewu Agriculture and Animal Husbandry co. LTD, Yangmaotan village, Menquan township, Shimen County; Rice farmers, Chaya village, Menquan township, Shimen County; Guzhang Bureau of Agriculture and Rural Development, Guzhang County; Guzhang Water Conservancy Bureau, Guzhang county; Longshan Bureau of Agriculture and Rural Development, Guzhang County; Longshan Water Conservancy Bureau, Guzhang county; Fenghuang Bureau of Agriculture and Rural Development, Guzhang County; Fenghuang Water Conservancy Bureau, Guzhang county; Luxi Bureau of Agriculture and Rural Development, Guzhang County; Luxi Water Conservancy Bureau, Guzhang county; Luxi Youth League, Guzhang County; Fenghuang Poverty Alleviation Office, Guzhang County; Village committee, women and farmers' cooperative in Meita Village, Guzhang County; Village committee, women and farmers' cooperative in Menghuzhou Village, Guzhang County; Menghuzhou village, Duanlong township, Guzhang County; Yangjiahe village, Duanlong township, Guzhang County;

177. Shaodong Bureau of Agriculture and Rural Development, Shaodong County; Shaodong Water Conservancy Bureau, Shaodong city; Daxiang Bureau of Agriculture and Rural Development; Daxiangn Water Conservancy Bureau, Daxiangn district, Shaodong County; Rucheng Bureau of Agriculture and Rural Development, Shaodong County; Rucheng Water Conservancy Bureau, Shaodong County; Longhui Bureau of Agriculture and Rural Development, Longhui Water Conservancy Bureau, Longhui district, Shaodong County; Shaodong Women's Federation, Shaodong County; Shaodong Youth League, Shaodong County; Daxiang Youth League, Shaodong County; Daxiang Development and Reform Commission, Shaodong County; Rucheng Youth League, Shaodong County; Rucheng Women's Federation, Shaodong County; Longhui Women's Federation, Shaodong County; Longhui Poverty Alleviation Office, Shaodong County; Longhui Youth League, Shaodong County; Shaodong Maternity and Child Care Center, Shaodong County; Village committee, women and farmers' cooperative in Yaojia Village, Shaodong County;

In addition, a consultative meeting with representatives of IFAD Executive Board in China and other relevant development partners will be organized in Beijing in November 2020 to present the main elements of the design and seek their feedback.

178. **Project Design and Delivery Team**: Matteo Marchisio (Country Director, APR); Robert Delve (Lead Global Technical Advisor and Project Technical Leader, PMI); Sun Yinhong (Country Program Officer, APR); Josef Ernstberger (Rural Development Specialist); Sashwati Mishra (Gender and Social Inclusion Analyst, ECG); Cai Kui (Social Development Specialist); Li Guangyong (Rural Infrastructure Specialist, China Agricultural University); Abdul Mohammed Alam (Economist); Ghulam Marri (Economist); Irene Li (Senior Regional Financial Officer, IFAD); Alvaro Fernandez (Regional Finance Officer, IFAD); Candra Samekto (Program Officer, APR); Mattia Prayer Galletti (Lead Technical Specialist, ECG); Kisa Mfalila (Regional Climate and Environmental Specialist); Puri Tola Satue (Legal Officer, LEG); Xiaozhe Zhang (Project Technical Specialist, OPR); Fabrizio Bresciani (Regional Economist, APR); Martina Huonder (Program Liaison, APR); Yinyin Shi (Country Program Assistant, APR).

Footnotes

[1] Regional disparities have been widening between urban and rural areas in last decades: Eastern urban centers experienced much faster economic growth and high dividends than the Western rural centers.

[2] As reflected by the Gini coefficient, which rose from 29% in 1981 to almost 47% in 2018.

[3] Presently, China does not have any explicitly written, unified, national policy on youth, or any official executive mechanism for carrying out and monitoring national or regional youth affairs. Youth policy is regarded as a component of the overall policy of the China's Communist Party.

[4] In this regard, the Government has recently launched a pilot "Mass Rural Youth Volunteer Program", which aims at facilitating the migration of ten million young volunteers from large cities to rural areas.

[5] The Youth League defines "youth" as individuals between 18 and 45 year old.

[6] The New Professional Farmers Development Program is a comprehensive training program launched by the Ministry of Agriculture in 2014 with the objective of making farming a more attractive profession and as a basis for local economic development. It is a national program covering all the country, implemented by the local authorities (counties and provinces), with central fiscal budget support. The purpose is to provide capacity development to a variety types of farmers, who choose farming as a profession, to allow them to be more productive, knowledgeable, skillful in the wake of agricultural modernization and transition. This would contribute to the agricultural development and food security, household income increase and poverty reduction, rural economic development and ultimately rural revitalization. The New Professional Farmers Development Program is aligned with the local agricultural industrialization activities.

[7] The World Bank is currently preparing a PforR lending operation in Hunan also supporting the Rural Revitalization program. As part of the preparation a comprehensive fiduciary assessment of the county public financing system will be undertaken by the World Bank. Pending the outcome of this fiduciary assessment IFAD may decide allowing the funds entering the general county budget or the funds going to the county project accounts, where they could be more closely audited.

[8] The proposed intervention (i.e. improvement and extension of the power supply system in the project area) is framed within the overall concept of "rural revitalization", which the proposed project aligns to and supports. The rural revitalization strategy is a comprehensive and integrated strategy aimed at developing the rural areas. The strategy encompasses several dimensions: economic development (to which agricultural development is only one dimension), ecological development/rehabilitation, cultural development, etc. Within this framework, infrastructure development (rural roads, irrigation, water supply, land improvements, etc. - but also water sanitation, electrification and energy supply systems, etc.) is a critical element to support the development of the rural areas, including for the livelihoods and economic development of the poor rural households. Within this context, the activity is functional to the implementation of some of the other project activities, and, overall, to the achievement of the overall objectives of the project.

[9] It is important to clarify that, in the context of this project, the term 'innovative' is used to describe a model, approach or mechanism that is different from the 'mainstreamed' approach. This definition reflects the Government's understanding and expectations. Some of the elements described below can be considered truly 'innovative' in the country, provincial or project area's context. Others may not be completely new in the country context, but their adoption may have been limited and their implementation may have encountered challenges that the Government is interested to understand and overcome.

[9] The project strategy builds on two important macro-trends in China: (i) a rapidly growing demand and consumer preferences for clean and safe food, for which the remote project areas have a comparative advantage. The project will focus on investments and organizational arrangements primarily on value addition (i.e. special products, branding, traceability, green and organic certification) and on linking consumers as directly as possible to the producers, which is now possible due to (ii) significant adoption of Information Technology (IT), which has penetrated most aspects of people's life in China. Online information and shopping including ordering food and even fresh food product has become common feature for many urban citizens. It permits development of more efficient forward and backward linkages and facilitates faster responses to consumer preferences, as well as increasing consumer control over production standards.

[13] Eligible expenditures for retroactive financing are those incurred to finance: (i) purchase of essential items (including equipment and procurement of necessary software) for the PMOs; (ii) recruitment of project staff and/or consultants and procurement of technical assistance; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the Project Implementation Manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits and study tours for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) recruitment of service providers.

China

Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 1: Logframe

Mission Dates: 27/04/2020 22/05/2020
Document Date: 12/10/2020
Project No. 2000002359
Report No. 5499-CN

Asia and the Pacific Division
Programme Management Department

Hunan Rural Revitalization Demonstration 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				Project M&E	Annually	PMOs	Continuity of government socio-economic policies and poverty reduction strategies and political commitment. (A) Farmers slow/reluctant tendency towards cooperative led organizations/ capturing upper value chain. (R) New Economic Entities thrive as per government new laws and regulations. (A)
	Females		52480	164000				
	Males		78720	164000				
	Young		39360	98400				
	Not Young		115456	229600				
	Indigenous people		20992	98400				
	Total number of persons receiving services		131200	328000				
	Young		12	30				
	1.a Corresponding number of households reached				Project M&E Report	Annually	PMOs	
	Women-headed households		4579	11447				
	Non-women-headed households		30641	76603				
	Households		35220	88050				
	1.b Estimated corresponding total number of households members				Project M&E Report	Annually	PMOs	
	Household members		165534	413835				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Project Goal Maintain poor and vulnerable households out of extreme poverty and increase their production and economic resilience	Beneficiaries reporting improved livelihood assets				Household Surveys, Govt Statistics	Baseline, Mid-term, Completion	PMOs	Continuity of economic, social and marketing stability in the target project area. (A) Poverty is a dynamic process associated with different socio-economic shocks, so maintaining zero rural poverty will be subject to such shocks (R)
	Total households		30	80				
	Female-headed households		30	80				
	Ethnic households		30	80				
Development Objective Improving income-generating opportunities for vulnerable rural people, particularly youth and women, increasing the inclusiveness of the benefit-sharing mechanisms from private sector linkages, and increasing the resilience of the rural population to climate change impacts.	At the end of the project, targeted households achieve at least a 30% increase in annual income from project-supported activities				Household Surveys, Government Statistics	Baseline, Mid-term and Completion	PMOs	Providing investment opportunities/ benefit sharing mechanism through enhanced and standard cooperatives/other economic entities to the poor farmers lead to high income. (A) Farmers reluctance to go with new economic entities led value chain and industry model. (R)
	Households		35	90				
	Female headed households		35	90				
	Ethnic households		35	90				
	2.2.1 New jobs created				Project M&E	Annually	PMOs	
	Job owner - men		800	2000				
	New jobs		1600	4000				
	Job owner - women		800	2000				
	Job owner - young		480	1200				
	IE.2.1 Individuals demonstrating an improvement in empowerment				Household survey, Pro-WEAI survey	Baseline, Mid-term and completion surveys	PMOs	
	Total persons		40	60				
	Females		38	60				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	Males		42	60				
	SF.2.1 Households satisfied with project-supported services				Household survey	Baseline, Mid-term and completion	PMOs	
	Households (%)		30	75				
	SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers				Household survey	Baseline, Mid-term and completion	PMOs	
	Households (%)		30	75				
Outcome 1. Strengthen inclusiveness and development of New Economic Entities	2.2.2 Supported rural enterprises reporting an increase in profit				Project M&E Reports	Annually	PMOs	Cooperative management are committed to smallholder membership. (A) Cooperatives are increasingly member-driven and responsive to smallholder needs. (A) Weak Farmers might be influenced by rich farmers (R)
	Number of enterprises		52	130				
	2.2.4 Supported rural producers' organizations members reporting new or improved services provided by their organization				Household survey	Baseline, Mid-term and completion	PMOs	
	Percentage of POs members		35	80				
	Households reporting increased profit from their production				Household survey	Baseline, Mid-term and completion	PMOs	
	households		35	80				
	Youth/women-initiated enterprises operational after 2 years				Project M&E Reports	Annually	PMOs	
	businesses			80				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Output 1.1 Mobilize private investment for rural business development in project areas	Number of co-investment plans supported under the project				Project M&E Reports	Annually	PMOs	Design estimates are realistic (A) Farmers are committed to abide by new cooperatives law (A) Farmers are new to genuine cooperatives with its profit mechanism sharing and might show lukewarm attitude or get influenced by rich farmer members. (R)
	plans		94	236				
Output 1.2 Support start-up business for rural youth and women	Start-up businesses of young people /women entrepreneurs supported				Project M&E Reports	Annually	PMOs	Design estimates are realistic (A) Farmers are committed to abide by new cooperatives law (A) Farmers are new to genuine cooperatives with its profit mechanism sharing and might show lukewarm attitude or get influenced by rich farmer members. (R)
	total start-ups		120	300				
	start-up of young		100	250				
	start-ups of women		60	150				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Outcome 2. Improved services for rural business development and rural community livelihood	3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices				Household survey	Baseline, Mid-term and completion	PMOs	Farmers/Rural enterprises will participate in climate information services workshop/centers (A) Climate sensitivity is new phenomon and might not be welcomed overwhelmingly. (R) Women will take part enthusiastically under project. (A)
	Households		6	15				
	Total number of household members		13650	34125				
	Households		2900	7260				
	Persons reporting improved business and livelihood services offered/facilitated by IC/BS and public institutions				Household survey	Baseline, Mid-term and completion	PMOs	
	persons		30	80				
	Women among those trained under professional farmer training program				Project M&E Reports	Annually	PMOs	
women trainee		35	45					
Output 2.1 Business development/support provided by service centers	2.1.2 Persons trained in income-generating activities or business management				Project M&E Reports	Annually	PMOs	Small holder farmers are interested to join upscale value chain and willing to pay related subscription and for the services. (A) Failure of farmer cooperatives and private enterprises to cooperative standards and farmers needs and excluding poor farmers from joining value chain development (R)
	Females		4600	11500				
	Males		4600	11500				
	Young		2760	6900				
	Persons trained in IGAs or BM (total)		9200	23000				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Output 2.2 Improving climate information and adaptation advice	3.1.2 Persons provided with climate information services				Project M&E Reports	Annually	PMOs	Farmers are climate sensitive (A)
	Females		5080	12700				
	Young		3050	7620				
	Persons provided with climate information services		10160	25400				
Output 2.3 Improved community livelihood services	Persons in rural areas received new or improved livelihood services				Project M&E reports	Annually	PMOs	FIs willing to participate in government rural revitalization strategy programme (A) Communities are willing to access credit. (A) Poor Farmers' (lack of) capacity to access and to pay back. (R)
	Total persons		10160	25400				
	Females		5080	12700				
	Males		5080	12700				
	Young		3050	7620				
	Ethnic		3050	5080				
Outcome 3. Improved Climate resilient infrastructure and rural environment	2.2.6 Households reporting improved physical access to markets, processing and storage facilities				Household survey	Baseline, Mid-term and Completion	PMOs	Adequate participation in climate related information training (A)
	Households reporting improved physical access to markets		7	15				
	Households reporting improved physical access to processing facilities		8	20				
	Households reporting improved physical access to storage facilities		8	20				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Output 3.1 Improved infrastructure and systems for climate resilient water and soil management	3.1.4 Land brought under climate-resilient practices				Project M&E Reports	Annually	PMOs	Local leaders and farmers are sensitive of the issue and assessment studies will find adequate sites for rainwater harvest (A)
	Hectares of land		720	1800				
Output 3.2 Improved rural infrastructure	1.1.2 Farmland under water-related infrastructure constructed/rehabilitated				Project M&E Reports	Annually	PMOs	Communities assume responsibility for use, maintenance and management of facilities invested in by the project (A)
	Hectares of land		2880	7200				
Output Stand alone output: Policy	Policy 1 Policy-relevant knowledge products completed				Project M&E Reports	Annually	PMOs	Commitment of Provincial stakeholders to the policy value of the project
	Number		1	3				

China

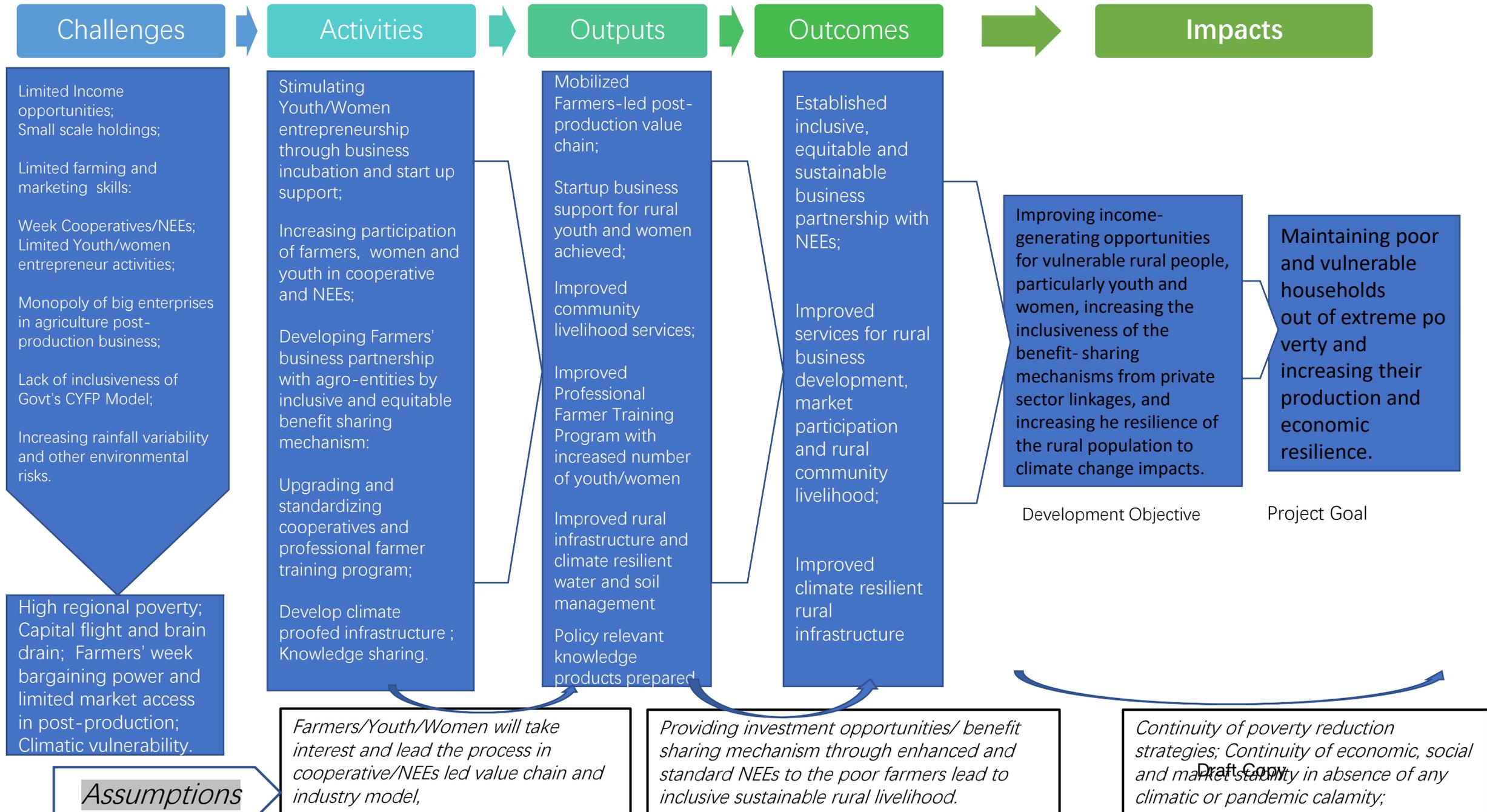
Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 2: Theory of change

Mission Dates: 27/04/2020 22/05/2020
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Project No. 2000002359
Report No. 5499-CN

Asia and the Pacific Division
Programme Management Department

H2RDP (China) – Theory of Change



China

Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 3: Project cost and financing: Detailed costs tables

Mission Dates: 27/04/2020 22/05/2020
Document Date: 12/10/2020
Project No. 2000002359
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Asia and the Pacific Division
Programme Management Department

Annex-3: H2RDP PROJECT COSTS AND FINANCING

- Project costs:** The total project cost is estimated at US\$ 173 million, including contingencies. The total base cost is US\$ 167 million; physical and price contingencies account for an estimated US\$ 6 million (i.e. 4 percent of the total base cost or 3.4 percent of the total project cost). Project costs are allocated among the three components as follows: (A) Inclusive Private Sector Investment Models (52.5 percent of the total project cost); (B) Climate-proofed Public Infrastructure Planning, Development and Improvement (40.4 percent of the total cost); and (C) Project Management, Knowledge Management, M&E, and Policy (7.2 percent of the total cost). Costs per component and sub-component, and financier are summarized in the cost tables 1& 2 given below.
- Project financing and co-financing:** IFAD will contribute to the project with a loan for a total amount of US\$ 60.2 million (35 percent of the total project cost). The Government will contribute US\$ 90.86 million (52.5 percent of the total cost), and the Private Sector, i.e. participating enterprises and NEEs , are expected to contribute approximately US\$ 21.4 million (12.4 percent of the total cost). The beneficiaries' contribution is expected to be approximately US\$ 0.45 million (0.3 percent of the total cost). A partnership with UNWomen to support gender mainstreaming and empowerment is established. UNWomen expected contribution is limited to technical assistance, for an estimated value of about US\$ 0.3 million. Costs by expenditure account are presented in Table 3 & 4 .
- Co-financing ratio:** The IFAD loan has a co-financing ratio of approximately 1:1.88. This is about 30% above the IFAD11 target of 1:1.4 (and more than twice above the 1:0.8 target for domestic co-financing)
- Assumptions:** Key assumptions used in estimating the project costs include (i) price contingencies assumed at 2.5% and applied on all items, except for Project Management; (ii) exchange rate at CNY 7.02 per USD and foreign inflation rate at 2%; (iii) a FIVE year implementation phase and the project starting in January 2021; (iv) all unit costs are input in Chinese Yuen, i.e. CNY; (v) taxes included in IFAD financing rules and (vi) shadow exchange ratio at 1; and (vii) cost tables are presented in China fiscal year which corresponds to Calendar Year.
- Basis for Unit costs:** Unit costs for all detailed Tables were provided by the respective counties, in particular for the Component-2, Climate proofed public infrastructure activities. Operations and maintenance costs for these interventions have been assumed at 1% of annual investment costs. Unit costs for Component 1: Support to inclusive rural development were developed in consultation with the respective Counties during the field visits and refined with the Provincial PMO. In doing so, some adjustments have been made but otherwise, total average expenditure for this component is more or less identical. Unit costs for the Component 3, Project Management, M&E, KM and Policy were provided by the Provincial PMO and these are all based on real time expenditures.
- Costab accounts:** Costab accounts are organised into following three accounts: (i) Procurement accounts, (ii) Disbursement accounts and (iii) Expenditure accounts.

Accordingly, following accounts have been created in accordance with the project expenditure categories and the project financing arrangements:

Procurement accounts (PA) a/	Disbursement accounts (DA)	Expenditure accounts (EA)
<i>Civil work_PA</i>	<i>Civil work_DA</i>	<i>Civil work_EA</i>
<i>Smart Civil work_PA</i>	<i>Smart Civil work_DA</i>	<i>Smart Civil work_EA</i>
<i>Equipment and materials_PA</i>	<i>Equipment and materials_DA</i>	<i>Equipment and materials_EA</i>
<i>Training, capacity building and TA_PA</i>	<i>Training, capacity building and TA_DA</i>	<i>Training, capacity building and TA_EA</i>
<i>Goods, services and inputs_PA</i>	<i>Goods, services and inputs_DA</i>	<i>Goods, services and inputs_EA</i>
<i>Grants and subsidy_PA</i>	<i>Grants and subsidy_DA</i>	<i>Grants and subsidy_EA</i>
<i>Salary and allowances_PA</i>	<i>Salary and allowances_DA</i>	<i>Salary and allowances_EA</i>
<i>Operating costs_PA</i>	<i>Operating costs_DA</i>	<i>Operating costs_EA</i>
<i>Operations and maintenance_PA</i>	<i>Operations and maintenance_DA</i>	<i>Operations and maintenance_EA</i>
a/ in Summary and Detailed tables, these accounts will end up with PA, DA & EA respectively		

7. **H2RDP Project accounts:** The project has three expenditure components including the project management and 5 sub-components. Cost Tables have according organised, prepared and provided in following pages: (i) first Summary Tables for components, and (ii) detailed Tables by Components and sub-components.

8. **Summary Tables:** These Tables are presented summarising all components by financiers (that is GOC, IFAD, PRIVATE SECTOR and BENEFICIARIES) under the project in thousand USD currency units. (*Tab file: H2RDP_components6.tab*)

9. **Detailed Cost Tables:** Each Detailed Table contains the following data and information relating to the project interventions and activities. These are description of an activity, unit, physical quantities by year, unit cost in CNY and USD, base costs in thousand USD currency unit, total costs including contingencies in thousand USD, percentage of disbursement account and financing rule (ie % of financing by Government, IFAD, private sector and the beneficiaries).

Components	Sub-components	Cost Table reference #
Inclusive private sector investments	a. Inclusive rural business development	1.1
	b. Rural business development services	1.2
	c. Professional farmer training	1.3
Climate-proofed public infrastructure	a. Climate resilient infrastructure	2.1
	b. Rural infrastructure	2.2
Project Management, M&E, KM and Policy	Project management, M&E, KM and Policy	3.1

10. IFAD Financing categories and proposed financing rules are shown in the Table below

China
H2RDP Design mission
Disbursement Accounts by IFAD
(US\$ '000)

	IFAD		Total
	Amount	%	Amount
A. Disbursement accounts			
1. works	-	-	53,569
2. Smart civil work	12,083	78.5	15,385
3. Equipment and materials	340	100.0	340
4. Training and workshops	4,627	45.6	10,155
5. Goods, services and inputs	7,352	98.1	7,494
6. Grants and subsidies	34,509	44.0	78,495
7. Salaries and allowances	860	33.0	2,605
8. Operating costs	428	8.2	5,194
9. Operations and maintenance	-	-	36
Total PROJECT COSTS	60,199	34.7	173,274

- (i) All civil works items are categorised under “smart civil works” category
- (ii) Expenditure categories Training and workshop and goods, services and inputs have been combined in to one disbursement category
- (iii) All grants to new business entities (BPs) and startup support to women and youth are categorised under Grant and subsidy
- (iv) All operating costs and staff salaries are categorised under “Operating costs and salaries”

11. Abbreviations used in costab Tables

SCW	Smart Civil work carried out under climate resilience
CW	Civil work
TWC	Training, workshop, capacity building and TA
GAS	Grant and subsidy
GSI	Goods, services and inputs
EAM	Equipment and materials
SAA	Salary and allowances
OPC	Office operating costs
OAM	Operations and maintenance
DA	Disbursement account

12. Retroactive financing: Retroactive expenditures are pre-financed by the borrower and such provisions are made to mitigate the risks of start-up delays and facilitate prompt execution of the project. As an exception to the General Conditions for agricultural development financing, IFAD will be seeking IFAD Executive Board approval for retroactive financing from the loan up to a maximum of 10% of the total IFAD financing (i.e US\$ 6 million) for eligible expenditures incurred as from the date which the design document got approval by Quality assurance group to the date of the entry in force of the financing agreement. Eligible expenditures for

retroactive financing are considered those incurred to finance the start-up and preparation project activities such as : (i) purchase of essential items (including equipment and procurement of MIS system) for the PMOs; (ii) recruitment of project staff; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the program implementation manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) training and technical assistance for cooperatives, including recruitment of service providers, cooperative support field officers, technical advisors for business plans development, brokers/facilitators for linkages with supermarkets; and value-chain officers and monitoring & evaluation officers; and (ix) business plans.

13. Financing of taxes: In order to improve the efficiency of funds flow and better support project implementation, IFAD's funds may be used to finance taxes that are not "excessive, discriminatory or otherwise unreasonable". In case the Government intends to use IFAD financing to finance taxes that is impossible or impractical to exempt, the Government would need to formalize such request in writing.

Annex 3 – H2RDP: Project cost and financing

Summary tables

Table 1: Project Cost Summary by Components (L/C CNY '000 & US '000)

Components Project Cost Summary	(CNY '000)			(US\$ '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
A. Components								
1. Inclusive private sector investment								
a. Inclusive rural business development	531,398	-	531,398	75,698	-	75,698	-	45
b. Rural business development services	64,938	-	64,938	9,250	-	9,250	-	6
c. Professional farmer training	17,283	-	17,283	2,462	-	2,462	-	1
Subtotal Inclusive private sector investment	613,618	-	613,618	87,410	-	87,410	-	52
2. Climate proof public infrastructure								
a. Climate resilient infrastructure	103,697	-	103,697	14,772	-	14,772	-	9
b. Rural infrastructure	368,210	-	368,210	52,452	-	52,452	-	31
Subtotal Climate proof public infrastructure	471,907	-	471,907	67,223	-	67,223	-	40
3. Project Management, KM, M&E and policy								
a. PMO	89,046	-	89,046	12,685	-	12,685	-	8
Total BASELINE COSTS	1,174,571	-	1,174,571	167,318	-	167,318	-	100
Physical Contingencies	-	-	-	-	-	-	-	-
Price Contingencies	41,810	-	41,810	5,956	-	5,956	-	4
Total PROJECT COSTS	1,216,380	-	1,216,380	173,274	-	173,274	-	104

Table 2: Project Costs by Component (and sub-components) and Financier (US\$ '000)

China H2RDP Design mission Components by Financiers (US\$ '000)															
GoC		IFAD		Private sector		UNWomen		Beneficiaries		Total		For.	Local	Duties &	
Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	(Excl. Taxes)	Taxes	
A. Components															
1. Inclusive private sector investment															
a. Inclusive rural business development	22,519	28.7	34,509	44.0	21,468	27.3	-	-	-	-	78,495	45.3	-	78,495	-
b. Rural business development services	684	7.1	8,925	92.9	-	-	-	-	-	-	9,609	5.5	-	8,820	789
c. Professional farmer training	-	-	2,628	100.0	-	-	-	-	-	-	2,628	1.5	-	2,365	263
Subtotal Inclusive private sector investment	23,203	25.6	46,062	50.8	21,468	23.7	-	-	-	-	90,732	52.4	-	90,732	1,052
2. Climate proof public infrastructure															
a. Climate resilient infrastructure	3,302	21.5	12,083	78.5	-	-	-	-	-	-	15,385	8.9	-	13,847	1,538
b. Rural infrastructure	54,020	99.2	-	-	-	-	-	-	452	0.8	54,472	31.4	-	49,115	5,357
Subtotal Climate proof public infrastructure	57,322	82.1	12,083	17.3	-	-	-	-	452	0.6	69,857	40.3	-	62,962	-
3. Project Management, KM, M&E and policy															
a. PMO	10,330	81.4	2,054	16.2	-	-	300	2.4	-	-	12,685	7.3	-	11,968	717
Total PROJECT COSTS	90,855	52.4	60,199	34.7	21,468	12.4	300	0.2	452	0.3	173,274	100.0	-	164,610	8,664

Table 3: Project Costs by Expenditure category and Financier (US\$ '000)

China H2RDP Design mission Expenditure Accounts by Financiers (US\$ '000)															
	GoC		IFAD		Private sector		UNWomen		Beneficiaries		Total		For.	Local	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	(Excl. Taxes)	Taxes
I. Investment Costs															
A. Expenditure accounts															
1. Works	53,569	100.0	-	-	-	-	-	-	-	-	53,569	30.9	-	48,212	5,357
2. Smart civil work	3,302	21.5	12,083	78.5	-	-	-	-	-	-	15,385	8.9	-	13,847	1,539
3. Equipment and materials	-	-	340	100.0	-	-	-	-	-	-	340	0.2	-	306	34
4. Training and workshops	5,228	51.5	4,627	45.6	-	-	300	3.0	-	-	10,155	5.9	-	9,169	985
5. Goods, services and inputs	142	1.9	7,352	98.1	-	-	-	-	-	-	7,494	4.3	-	6,745	749
6. Grants and subsidies	22,519	28.7	34,509	44.0	21,468	27.3	-	-	-	-	78,495	45.3	-	78,495	-
Total Investment Costs	84,760	51.2	58,911	35.6	21,468	13.0	300	0.2	-	-	165,439	95.5	-	156,774	8,664
II. Recurrent Costs															
A. operating costs															
1. Salaries and allowances	1,745	67.0	860	33.0	-	-	-	-	-	-	2,605	1.5	-	2,605	-
2. Operating costs	4,315	83.1	427	8.2	-	-	-	-	452	8.7	5,194	3.0	-	5,194	-
3. Operations and maintenance	36	100.0	-	-	-	-	-	-	-	-	36	-	-	36	-
Total Recurrent Costs	6,095	77.8	1,288	16.4	-	-	-	-	452	5.8	7,835	4.5	-	7,835	-
Total PROJECT COSTS	90,855	52.4	60,199	34.7	21,468	12.4	300	0.2	452	0.3	173,274	100.0	-	164,610	8,664

Table 4: Project Costs by Component (and sub-components) and Expenditure category (US\$ '000)

China

H2RDP Design mission

Expenditure Accounts by Components - Base (US\$ '000)	Components								
	Private sector investment			Climate proof public infrastructure		Project Management, KM, M&E and policy PMO	Total	Physical Contingencies	
	Inclusive rural business development	Rural business development services	Professional farmer training	Climate resilient infrastructure	Rural infrastructure			%	Amount
I. Investment Costs									
A. Expenditure accounts									
1. Works	-	-	-	-	51,548	-	51,548	-	-
2. Smart civil work	-	-	-	14,772	-	-	14,772	-	-
3. Equipment and materials	-	-	-	-	-	340	340	-	-
4. Training and workshops	-	910	2,462	-	-	6,599	9,971	-	-
5. Goods, services and inputs	-	6,625	-	-	-	528	7,154	-	-
6. Grants and subsidies	75,698	-	-	-	-	-	75,698	-	-
Total Investment Costs	75,698	7,535	2,462	14,772	51,548	7,468	159,483	-	-
II. Recurrent Costs									
A. operating costs									
1. Salaries and allowances	-	860	-	-	-	1,745	2,605	-	-
2. Operating costs	-	855	-	-	903	3,436	5,194	-	-
3. Operations and maintenance	-	-	-	-	-	36	36	-	-
Total Recurrent Costs	-	1,715	-	-	903	5,217	7,835	-	-
Total BASELINE COSTS	75,698	9,250	2,462	14,772	52,452	12,685	167,318	-	-
Physical Contingencies	-	-	-	-	-	-	-	-	-
Price Contingencies	2,798	359	166	614	2,020	-	5,956	-	-
Total PROJECT COSTS	78,495	9,609	2,628	15,385	54,472	12,685	173,274	-	-

H2RDP Disbursement Accounts by Financiers

China

H2RDP Design mission

Disbursement Accounts by Financiers
(US\$ '000)

	GoC		IFAD		Private sector		UNWomen		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%				
A. Disbursement accounts																
1. works	53,569	100.0	-	-	-	-	-	-	-	-	-	53,569	30.9	-	48,212	5,357
2. Smart civil work	3,302	21.5	12,083	78.5	-	-	-	-	-	-	-	15,385	8.9	-	13,847	1,539
3. Equipment and materials	-	-	340	100.0	-	-	-	-	-	-	-	340	0.2	-	306	34
4. Training and workshops	5,228	51.5	4,627	45.6	-	-	300	3.0	-	-	-	10,155	5.9	-	9,169	985
5. Goods, services and inputs	142	1.9	7,352	98.1	-	-	-	-	-	-	-	7,494	4.3	-	6,745	749
6. Grants and subsidies	22,519	28.7	34,509	44.0	21,468	27.3	-	-	-	-	-	78,495	45.3	-	78,495	-
7. Salaries and allowances	1,745	67.0	860	33.0	-	-	-	-	-	-	-	2,605	1.5	-	2,605	-
8. Operating costs	4,314	83.1	428	8.2	-	-	-	-	452	8.7	5,194	3.0	-	5,194	-	
9. Operations and maintenance	36	100.0	-	-	-	-	-	-	-	-	36	-	-	36	-	
Total PROJECT COSTS	90,855	52.4	60,199	34.7	21,468	12.4	300	0.2	452	0.3	173,274	100.0	-	164,610	8,664	

H2RDP Components by Financiers

China
H2RDP Design mission
Components by Financiers
(US\$ '000)

	GoC		IFAD		Private sector		UNWomen		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Components															
1. Inclusive private sector investment															
a. Inclusive rural business development	22,519	28.7	34,509	44.0	21,468	27.3	-	-	-	-	78,495	45.3	-	78,495	-
b. Rural business development services	684	7.1	8,925	92.9	-	-	-	-	-	-	9,609	5.5	-	8,820	789
c. Professional farmer training	-	-	2,628	100.0	-	-	-	-	-	-	2,628	1.5	-	2,365	263
Subtotal Inclusive private sector investment	23,203	25.6	46,062	50.8	21,468	23.7	-	-	-	-	90,732	52.4	-	90,732	1,052
2. Climate proof public infrastructure															
a. Climate resilient infrastructure	3,302	21.5	12,083	78.5	-	-	-	-	-	-	15,385	8.9	-	13,847	1,538
b. Rural infrastructure	54,020	99.2	-	-	-	-	-	-	452	0.8	54,472	31.4	-	49,115	5,357
Subtotal Climate proof public infrastructure	57,322	82.1	12,083	17.3	-	-	-	-	452	0.6	69,857	40.3	-	62,962	-
3. Project Management, KM, M&E and policy															
a. PMO	10,330	81.4	2,054	16.2	-	-	300	2.4	-	-	12,685	7.3	-	11,968	717
Total PROJECT COSTS	90,855	52.4	60,199	34.7	21,468	12.4	300	0.2	452	0.3	173,274	100.0	-	164,610	8,664

Expenditure accounts by financiers

China

H2RDP Design mission

Expenditure Accounts by Financiers

(US\$ '000)

	GoC		IFAD		Private sector		UNWomen		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
I. Investment Costs															
A. Expenditure accounts															
1. Works	53,569	100.0	-	-	-	-	-	-	-	-	53,569	30.9	-	48,212	5,357
2. Smart civil work	3,302	21.5	12,083	78.5	-	-	-	-	-	-	15,385	8.9	-	13,847	1,539
3. Equipment and materials	-	-	340	100.0	-	-	-	-	-	-	340	0.2	-	306	34
4. Training and workshops	5,228	51.5	4,627	45.6	-	-	300	3.0	-	-	10,155	5.9	-	9,169	985
5. Goods, services and inputs	142	1.9	7,352	98.1	-	-	-	-	-	-	7,494	4.3	-	6,745	749
6. Grants and subsidies	22,519	28.7	34,509	44.0	21,468	27.3	-	-	-	-	78,495	45.3	-	78,495	-
Total Investment Costs	84,760	51.2	58,911	35.6	21,468	13.0	300	0.2	-	-	165,439	95.5	-	156,774	8,664
II. Recurrent Costs															
A. operating costs															
1. Salaries and allowances	1,745	67.0	860	33.0	-	-	-	-	-	-	2,605	1.5	-	2,605	-
2. Operating costs	4,315	83.1	427	8.2	-	-	-	-	452	8.7	5,194	3.0	-	5,194	-
3. Operations and maintenance	36	100.0	-	-	-	-	-	-	-	-	36	-	-	36	-
Total Recurrent Costs	6,095	77.8	1,288	16.4	-	-	-	-	452	5.8	7,835	4.5	-	7,835	-
Total PROJECT COSTS	90,855	52.4	60,199	34.7	21,468	12.4	300	0.2	452	0.3	173,274	100.0	-	164,610	8,664

H2RDP Project cost summary

China

H2RDP Design mission

Components Project Cost Summary

	(CNY '000)			(US\$ '000)			%	% Total
	Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
A. Components								
1. Inclusive private sector investment								
a. Inclusive rural business development	531,398	-	531,398	75,698	-	75,698	-	45
b. Rural business development services	64,938	-	64,938	9,250	-	9,250	-	6
c. Professional farmer training	17,283	-	17,283	2,462	-	2,462	-	1
Subtotal Inclusive private sector investment	613,618	-	613,618	87,410	-	87,410	-	52
2. Climate proof public infrastructure								
a. Climate resilient infrastructure	103,697	-	103,697	14,772	-	14,772	-	9
b. Rural infrastructure	368,210	-	368,210	52,452	-	52,452	-	31
Subtotal Climate proof public infrastructure	471,907	-	471,907	67,223	-	67,223	-	40
3. Project Management, KM, M&E and policy								
a. PMO	89,046	-	89,046	12,685	-	12,685	-	8
Total BASELINE COSTS	1,174,571	-	1,174,571	167,318	-	167,318	-	100
Physical Contingencies	-	-	-	-	-	-	-	-
Price Contingencies	41,810	-	41,810	5,956	-	5,956	-	4
Total PROJECT COSTS	1,216,380	-	1,216,380	173,274	-	173,274	-	104

H2RDP Expenditure accounts project cost summary

China								%	% Total
H2RDP Design mission								Foreign	Base
Expenditure Accounts Project Cost Summary		(CNY '000)			(US\$ '000)			Exchange	Costs
		Local	Foreign	Total	Local	Foreign	Total		
I. Investment Costs									
A. Expenditure accounts									
1. Works		361,869	-	361,869	51,548	-	51,548	-	31
2. Smart civil work		103,697	-	103,697	14,772	-	14,772	-	9
3. Equipment and materials		2,390	-	2,390	340	-	340	-	-
4. Training and workshops		69,999	-	69,999	9,971	-	9,971	-	6
5. Goods, services and inputs		50,218	-	50,218	7,154	-	7,154	-	4
6. Grants and subsidies		531,398	-	531,398	75,698	-	75,698	-	45
Total Investment Costs		1,119,570	-	1,119,570	159,483	-	159,483	-	95
II. Recurrent Costs									
A. operating costs									
1. Salaries and allowances		18,290	-	18,290	2,605	-	2,605	-	2
2. Operating costs		36,461	-	36,461	5,194	-	5,194	-	3
3. Operations and maintenance		250	-	250	36	-	36	-	-
Total Recurrent Costs		55,000	-	55,000	7,835	-	7,835	-	5
Total BASELINE COSTS		1,174,571	-	1,174,571	167,318	-	167,318	-	100
Physical Contingencies		-	-	-	-	-	-	-	-
Price Contingencies		41,810	-	41,810	5,956	-	5,956	-	4
Total PROJECT COSTS		1,216,380	-	1,216,380	173,274	-	173,274	-	104

Project cost summary: IFAD financing %

China
H2RDP Design mission
Project Cost Summary
(US\$ '000)

A. Components

	Cost Including Contingencies	% of Total	IFAD Financing	% Financing
1. Inclusive private sector investment				
a. Inclusive rural business development	78,495	45.3	34,509	44.0
b. Rural business development services	9,609	5.5	8,925	92.9
c. Professional farmer training	2,628	1.5	2,628	100.0
Subtotal Inclusive private sector investment	90,732	52.4	46,062	50.8
2. Climate proof public infrastructure				
a. Climate resilient infrastructure	15,385	8.9	12,083	78.5
b. Rural infrastructure	54,472	31.4	-	-
Subtotal Climate proof public infrastructure	69,857	40.3	12,083	17.3
3. Project Management, KM, M&E and policy				
a. PMO	12,685	7.3	2,054	16.2
Total PROJECT COSTS	173,274	100.0	60,199	34.7

Expenditure accounts by components

China

H2RDP Design mission

Expenditure Accounts by Components - Base
(US\$ '000)

	Components								Physical Contingencies		
	Private sector investment		Professional farmer training	Climate proof public infrastructure		Rural infrastructure	Project Management, KM, M&E and policy PMO				Total
	Inclusive rural business development	Rural business development services		Climate resilient infrastructure	Rural infrastructure						
I. Investment Costs											
A. Expenditure accounts											
1. Works	-	-	-	-	51,548	-	-	51,548	-	-	
2. Smart civil work	-	-	-	14,772	-	-	14,772	-	-		
3. Equipment and materials	-	-	-	-	-	340	340	-	-		
4. Training and workshops	-	910	2,462	-	-	6,599	9,971	-	-		
5. Goods, services and inputs	-	6,625	-	-	-	528	7,154	-	-		
6. Grants and subsidies	75,698	-	-	-	-	-	75,698	-	-		
Total Investment Costs	75,698	7,535	2,462	14,772	51,548	7,468	159,483	-	-		
II. Recurrent Costs											
A. operating costs											
1. Salaries and allowances	-	860	-	-	-	1,745	2,605	-	-		
2. Operating costs	-	855	-	-	903	3,436	5,194	-	-		
3. Operations and maintenance	-	-	-	-	-	36	36	-	-		
Total Recurrent Costs	-	1,715	-	-	903	5,217	7,835	-	-		
Total BASELINE COSTS	75,698	9,250	2,462	14,772	52,452	12,685	167,318	-	-		
Physical Contingencies	-	-	-	-	-	-	-	-	-		
Price Contingencies	2,798	359	166	614	2,020	-	5,956	-	-		
Total PROJECT COSTS	78,495	9,609	2,628	15,385	54,472	12,685	173,274	-	-		

Project components by year –baseline costs

China

H2RDP Design mission

Project Components by Year -- Base Costs

	Base Cost (CNY '000)						Base Cost (US\$ '000)					
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
A. Components												
1. Inclusive private sector investment												
a. Inclusive rural business development	179,730	193,819	157,849	-	-	531,398	25,603	27,609	22,486	-	-	75,698
b. Rural business development services	14,119	22,149	13,355	10,213	5,102	64,938	2,011	3,155	1,902	1,455	727	9,250
c. Professional farmer training	2,826	3,456	3,623	3,689	3,689	17,283	403	492	516	525	525	2,462
Subtotal Inclusive private sector investment	196,675	219,423	174,827	13,902	8,791	613,618	28,016	31,257	24,904	1,980	1,252	87,410
2. Climate proof public infrastructure												
a. Climate resilient infrastructure	30,328	38,606	23,247	8,612	2,905	103,697	4,320	5,499	3,311	1,227	414	14,772
b. Rural infrastructure	89,442	121,108	85,275	47,335	25,050	368,210	12,741	17,252	12,147	6,743	3,568	52,452
Subtotal Climate proof public infrastructure	119,770	159,714	108,522	55,947	27,954	471,907	17,061	22,751	15,459	7,970	3,982	67,223
3. Project Management, KM, M&E and policy												
a. PMO	20,170	17,192	17,542	17,242	16,898	89,046	2,873	2,449	2,499	2,456	2,407	12,685
Total BASELINE COSTS	336,615	396,330	300,891	87,091	53,644	1,174,571	47,951	56,457	42,862	12,406	7,642	167,318
Physical Contingencies	-	-	-	-	-	-	-	-	-	-	-	-
Price Contingencies	3,695	13,286	16,730	5,079	3,019	41,810	526	1,893	2,383	724	430	5,956
Total PROJECT COSTS	340,310	409,616	317,621	92,170	56,663	1,216,380	48,477	58,350	45,245	13,130	8,072	173,274

H2RDP Project components by year –total including contingencies

China
H2RDP Design mission

Project Components by Year -- Totals Including Contingencies:	Totals Including Contingencies (CNY '000)						Totals Including Contingencies (US\$ '000)					
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
A. Components												
1. Inclusive private sector investment												
a. Inclusive rural business development	181,977	201,147	167,913	-	-	551,037	25,923	28,653	23,919	-	-	78,495
b. Rural business development services	14,265	22,868	13,984	10,918	5,419	67,454	2,032	3,258	1,992	1,555	772	9,609
c. Professional farmer training	2,862	3,587	3,854	4,022	4,122	18,447	408	511	549	573	587	2,628
Subtotal Inclusive private sector investment	199,103	227,602	185,751	14,940	9,542	636,938	28,362	32,422	26,460	2,128	1,359	90,732
2. Climate proof public infrastructure												
a. Climate resilient infrastructure	30,663	39,976	24,729	9,390	3,246	108,004	4,368	5,695	3,523	1,338	462	15,385
b. Rural infrastructure	90,374	124,845	89,599	50,597	26,977	382,392	12,874	17,784	12,763	7,208	3,843	54,472
Subtotal Climate proof public infrastructure	121,037	164,821	114,328	59,987	30,223	490,396	17,242	23,479	16,286	8,545	4,305	69,857
3. Project Management, KM, M&E and policy												
a. PMO	20,170	17,192	17,542	17,242	16,898	89,046	2,873	2,449	2,499	2,456	2,407	12,685
Total PROJECT COSTS	340,310	409,616	317,621	92,170	56,663	1,216,380	48,477	58,350	45,245	13,130	8,072	173,274

Project components by year – investment and recurrent costs

China

H2RDP Design mission

Project Components by Year – Investment/Recurrent Costs

	Totals Including Contingencies (CNY '000)						Totals Including Contingencies (US\$ '000)					
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
A. Components												
1. Inclusive private sector investment												
a. Inclusive rural business development												
Investment Costs	181,977	201,147	167,913	-	-	551,037	25,923	28,653	23,919	-	-	78,495
b. Rural business development services												
Investment Costs	11,857	20,460	11,576	8,510	3,011	55,414	1,689	2,915	1,649	1,212	429	7,894
Recurrent Costs	2,408	2,408	2,408	2,408	2,408	12,040	343	343	343	343	343	1,715
Subtotal Rural business development services	14,265	22,868	13,984	10,918	5,419	67,454	2,032	3,258	1,992	1,555	772	9,609
c. Professional farmer training												
Investment Costs	2,862	3,587	3,854	4,022	4,122	18,447	408	511	549	573	587	2,628
Subtotal Inclusive private sector investment	199,103	227,602	185,751	14,940	9,542	636,938	28,362	32,422	26,460	2,128	1,359	90,732
2. Climate proof public infrastructure												
a. Climate resilient infrastructure												
Investment Costs	30,663	39,976	24,729	9,390	3,246	108,004	4,368	5,695	3,523	1,338	462	15,385
b. Rural infrastructure												
Investment Costs	88,356	123,019	88,479	49,854	26,344	376,051	12,586	17,524	12,604	7,102	3,753	53,569
Recurrent Costs	2,018	1,826	1,120	744	632	6,341	287	260	160	106	90	903
Subtotal Rural infrastructure	90,374	124,845	89,599	50,597	26,977	382,392	12,874	17,784	12,763	7,208	3,843	54,472
Subtotal Climate proof public infrastructure	121,037	164,821	114,328	59,987	30,223	490,396	17,242	23,479	16,286	8,545	4,305	69,857
3. Project Management, KM, M&E and policy												
a. PMO												
Investment Costs	12,846	9,869	10,219	9,919	9,575	52,426	1,830	1,406	1,456	1,413	1,364	7,468
Recurrent Costs	7,324	7,324	7,324	7,324	7,324	36,620	1,043	1,043	1,043	1,043	1,043	5,217
Subtotal PMO	20,170	17,192	17,542	17,242	16,898	89,046	2,873	2,449	2,499	2,456	2,407	12,685
Total PROJECT COSTS	340,310	409,616	317,621	92,170	56,663	1,216,380	48,477	58,350	45,245	13,130	8,072	173,274
Total Investment Costs	328,560	398,058	306,769	81,694	46,299	1,161,380	46,803	56,703	43,699	11,637	6,595	165,439
Total Recurrent Costs	11,750	11,558	10,852	10,476	10,364	55,000	1,674	1,646	1,546	1,492	1,476	7,835

Expenditure accounts by year-base costs and contingencies

China
H2RDP Design mission

Expenditure Accounts by Years – Base Costs	Base Cost (CNY '000)						Base Cost (US\$ '000)					Fore
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
I. Investment Costs												
A. Expenditure accounts												
1. Works	87,424	119,282	84,155	46,591	24,417	361,869	12,454	16,992	11,988	6,637	3,478	51,548
2. Smart civil work	30,328	38,606	23,247	8,612	2,905	103,697	4,320	5,499	3,311	1,227	414	14,772
3. Equipment and materials	2,390	-	-	-	-	2,390	340	-	-	-	-	340
4. Training and workshops	14,538	15,894	14,180	12,865	12,521	69,999	2,071	2,264	2,020	1,833	1,784	9,971
5. Goods, services and inputs	10,455	17,171	10,609	8,547	3,436	50,218	1,489	2,446	1,511	1,218	490	7,154
6. Grants and subsidies	179,730	193,819	157,849	-	-	531,398	25,603	27,609	22,486	-	-	75,698
Total Investment Costs	324,865	384,771	290,039	76,615	43,279	1,119,570	46,277	54,811	41,316	10,914	6,165	159,483
II. Recurrent Costs												
A. operating costs												
1. Salaries and allowances	3,658	3,658	3,658	3,658	3,658	18,290	521	521	521	521	521	2,605
2. Operating costs	8,042	7,850	7,144	6,768	6,656	36,461	1,146	1,118	1,018	964	948	5,194
3. Operations and maintenance	50	50	50	50	50	250	7	7	7	7	7	36
Total Recurrent Costs	11,750	11,558	10,852	10,476	10,364	55,000	1,674	1,646	1,546	1,492	1,476	7,835
Total BASELINE COSTS	336,615	396,330	300,891	87,091	53,644	1,174,571	47,951	56,457	42,862	12,406	7,642	167,318
Physical Contingencies	-	-	-	-	-	-	-	-	-	-	-	-
Price Contingencies	3,695	13,286	16,730	5,079	3,019	41,810	526	1,893	2,383	724	430	5,956
Total PROJECT COSTS	340,310	409,616	317,621	92,170	56,663	1,216,380	48,477	58,350	45,245	13,130	8,072	173,274

Expenditure accounts by year-total including contingencies

China
H2RDP Design mission

Expenditure Accounts by Years -- Totals Includ	Totals Including Contingencies (CNY '000)						Totals Including Contingencies (US\$ '000)					
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
I. Investment Costs												
A. Expenditure accounts												
1. Works	88,356	123,019	88,479	49,854	26,344	376,051	12,586	17,524	12,604	7,102	3,753	53,569
2. Smart civil work	30,663	39,976	24,729	9,390	3,246	108,004	4,368	5,695	3,523	1,338	462	15,385
3. Equipment and materials	2,390	-	-	-	-	2,390	340	-	-	-	-	340
4. Training and workshops	14,599	16,123	14,411	13,198	12,955	71,286	2,080	2,297	2,053	1,880	1,845	10,155
5. Goods, services and inputs	10,576	17,792	11,238	9,252	3,753	52,611	1,507	2,534	1,601	1,318	535	7,494
6. Grants and subsidies	181,977	201,147	167,913	-	-	551,037	25,923	28,653	23,919	-	-	78,495
Total Investment Costs	328,560	398,058	306,769	81,694	46,299	1,161,380	46,803	56,703	43,699	11,637	6,595	165,439
II. Recurrent Costs												
A. operating costs												
1. Salaries and allowances	3,658	3,658	3,658	3,658	3,658	18,290	521	521	521	521	521	2,605
2. Operating costs	8,042	7,850	7,144	6,768	6,656	36,461	1,146	1,118	1,018	964	948	5,194
3. Operations and maintenance	50	50	50	50	50	250	7	7	7	7	7	36
Total Recurrent Costs	11,750	11,558	10,852	10,476	10,364	55,000	1,674	1,646	1,546	1,492	1,476	7,835
Total PROJECT COSTS	340,310	409,616	317,621	92,170	56,663	1,216,380	48,477	58,350	45,245	13,130	8,072	173,274

Financing Investment and Recurrent costs by year: total including contingencies

China

H2RDP Design mission

Financing of Investment/Recurrent

(US\$ '000)

	Financing					Total
	2021	2022	2023	2024	2025	
I. Investment Costs						
GoC	22,239	27,988	21,411	8,295	4,827	84,760
IFAD	17,396	20,806	15,674	3,267	1,769	58,911
Private sector	7,094	7,835	6,539	-	-	21,468
UNWomen	75	75	75	75	-	300
Total Investment Costs	46,803	56,703	43,699	11,637	6,595	165,439
II. Recurrent Costs						
GoC	1,273	1,259	1,209	1,182	1,174	6,095
IFAD	258	258	258	258	258	1,288
Beneficiaries	144	130	80	53	45	452
Total Recurrent Costs	1,674	1,646	1,546	1,492	1,476	7,835
III. Financial Charges						
Total Financing of Costs	48,477	58,350	45,245	13,130	8,072	173,274

Annex-3: DETAILED COST TABLES BY COMPONENTS (sub-components)

Table 1.1: Inclusive Rural Business Development

China
H2RDP Design mission
Table 1.0. Summary: Inclusive rural business

Detailed Costs	Unit	Quantities					Total	Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Total	Disb. Acct.	Fin. Rule
		2021	2022	2023	2024	2025				2021	2022	2023	2024	2025			
I. Investment Costs																	
A. Investment support	entity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GRANT_DA	IFAD (100%)
B. BP entities																	
IFAD	entity	80	86	70	-	-	236	864,078	123,088	9,970	10,986	9,166	-	-	30,121	GRANT_DA	IFAD (100%)
Govt of China	entity	80	86	70	-	-	236	645,985	92,021	7,454	8,213	6,852	-	-	22,519	GRANT_DA	GOVT
Private sector	entity	80	86	70	-	-	236	584,367	83,243	6,743	7,430	6,199	-	-	20,371	GRANT_DA	PRIVATE (100%)
Subtotal BP entities										24,167	26,628	22,216	-	-	73,011		
C. Business startup for women/youth	startup	104	117	96	-	-	317	117,073	16,677	1,756	2,025	1,703	-	-	5,484	GRANT_DA	IFAD (80%), PRIVATE (20%)
Total										25,923	28,653	23,919	-	-	78,495		

Table-1.2: Rural Business Development Services

China																	
H2RDP Design mission																	
Table 2.0. Summary: Rural business development services																	
Detailed Costs																	
Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						Disb. Acct.	Fin. Rule	
	2021	2022	2023	2024	2025	Total			2021	2022	2023	2024	2025	Total			
I. Investment Costs																	
A. Agri-business development																	
1. Business incubation centres /a																	
Setting up	centre	20	30	-	-	-	50	48,760	6,946	141	216	-	-	-	357	GSI_DA	IFAD (100%)
Technical assistance to service centres	centre	20	30	-	-	-	50	314,402	44,787	907	1,394	-	-	-	2,301	GSI_DA	IFAD (100%)
Technical assistance to clients	centre	-	20	30	-	-	50	118,230	16,842	-	350	537	-	-	887	GSI_DA	IFAD (100%)
Review and support of business	centre	-	-	20	30	-	50	148,520	21,157	-	-	450	692	-	1,142	GSI_DA	IFAD (100%)
Subtotal Business incubation centres										1,048	1,960	988	692	-	4,687		
2. Youth/Women business capacity																	
Mentoring of startup candidates	centre	-	40	50	50	-	140	18,000	2,564	-	106	136	140	-	383	GSI_DA	IFAD (100%)
Subtotal Agri-business development										1,048	2,067	1,124	832	-	5,070		
B. Inclusive rural services																	
1. Climate smart services																	
Monitoring and early warning systems	centre	16	24	-	-	-	40	72,000	10,256	166	255	-	-	-	422	TRAINING_DA	IFAD (100%)
Capacity building and technical services	centre	16	24	-	-	-	40	18,000	2,564	42	64	-	-	-	105	TRAINING_DA	IFAD (100%)
Climate related insurance	centre	-	16	24	-	-	40	45,000	6,410	-	103	154	-	-	256	TRAINING_DA	GOVT
Subtotal Climate smart services										208	422	154	-	-	783		
2. Epidemic prevention and mitigation (COVID-19)																	
Developing guidelines	Lumpsum	10	-	-	-	-	10	27,000	3,846	39	-	-	-	-	39	TRAINING_DA	IFAD (100%)
Providing expert assessment and design of risk mitigation measures	centre	20	30	-	-	-	50	14,400	2,051	42	64	-	-	-	105	TRAINING_DA	IFAD (100%)
Subtotal Epidemic prevention and mitigation (COVID-19)										80	64	-	-	-	144		
3. Other production and rural services																	
Inputs	Lumpsum	10	10	10	10	11	51	200,117	28,507	289	296	303	311	350	1,549	GSI_DA	IFAD (100%)
Provision of collective services	Lumpsum	10	10	10	10	11	51	44,824	6,385	65	66	68	70	78	347	GSI_DA	IFAD (100%)
Subtotal Other production and rural services										353	362	371	380	429	1,896		
Subtotal Inclusive rural services										641	848	525	380	429	2,824		
Total Investment Costs										1,689	2,915	1,649	1,212	429	7,894		
II. Recurrent Costs																	
A. Staff salary																	
Staff salary /b	pers_year	20	20	20	20	20	100	60,400	8,604	172	172	172	172	172	860	SAA_DA	IFAD (100%)
B. Other operating costs																	
Rental expenditure	office_year	10	10	10	10	10	50	60,000	8,547	85	85	85	85	85	427	OPC_DA	GOVT
Office operating costs	office_year	10	10	10	10	10	50	60,000	8,547	85	85	85	85	85	427	OPC_DA	IFAD (100%)
Subtotal Other operating costs										171	171	171	171	171	855		
Total Recurrent Costs										343	343	343	343	343	1,715		
Total										2,032	3,258	1,992	1,555	772	9,609		

/a Refurbishing building, facilities, etc
/b 3 staff in each county centre

Table-1.3: Professional Farmers Training

China																	
H2RDP Design mission																	
Table 3.0. Summary: Professional farmer training																	
Detailed Costs																	
Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						Disb. Acct.	Fin. Rule	
	2021	2022	2023	2024	2025	Total			2021	2022	2023	2024	2025	Total			
I. Investment Costs																	
A. Professional farmer training																	
1. Number of trainees																	
# of incremental training (DLI_1)	Lumpsum	1,000	1,000	1,000	1,000	1,000	5,000	1,978	282	285	292	300	307	315	1,500	TRAINING_DA	IFAD (100%)
2. Proportion of women trainees																	
Incremental trainees (DLI_2)	persons	249	372	449	499	499	2,068	1,310	187	47	72	89	102	104	414	TRAINING_DA	IFAD (100%)
3. Average age of trainees DLI_3																	
Reduction in age of trainees (DLI_3)	pers_year	7,968	15,118	16,130	16,130	16,130	71,476	66	9	75	146	160	164	168	714	TRAINING_DA	IFAD (100%)
Total										408	511	549	573	587	2,628		

Table-2.1: Climate Resilient Infrastructure

China
H2RDP Design mission
Table 4.0. Summary: Climate resilient infrastructure

Detailed Costs	Unit	Quantities					Total	Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Total	Disb. Acct.	Fin. Rule
		2021	2022	2023	2024	2025				2021	2022	2023	2024	2025			
I. Investment Costs																	
A. Climate resilient infrastructure (IFAD)																	
1. Irrigation facilities																	
Irrigation canals /a	km	31	45	18	9	3	106	225,011	32,053	1,006	1,497	614	315	107	3,539	SCW_DA	IFAD (100%)
Pressure pipelines	km	29	33	23	8	4	97	136,984	19,513	573	668	477	170	87	1,976	SCW_DA	IFAD (100%)
Head control and systems	each	2,002	2,505	3,004	4	2	7,517	258	37	74	96	117	0	0	288	SCW_DA	IFAD (100%)
Culverts	each	12	10	11	5	2	40	10,350	1,474	18	15	17	8	3	62	SCW_DA	IFAD (100%)
Retaining dam	each	16	20	18	12	11	77	15,966	2,274	37	47	44	30	28	185	SCW_DA	IFAD (100%)
Aqueducts	each	7	9	9	3	2	30	22,500	3,205	23	30	31	10	7	101	SCW_DA	IFAD (100%)
Sluices	each	12	22	21	20	10	85	10,058	1,433	17	33	32	31	16	129	SCW_DA	IFAD (100%)
Bridges, canal crossing structures	each	1	3	3	-	-	7	57,856	8,242	8	26	26	-	-	60	SCW_DA	IFAD (100%)
Subtotal Irrigation facilities										1,757	2,412	1,358	564	249	6,340		
2. Water supply facilities																	
Pumping stations	site	6	9	5	2	1	23	103,060	14,681	89	137	78	32	16	353	SCW_DA	IFAD (100%)
Water ponds	site	29	50	22	8	1	110	98,353	14,010	411	727	328	122	16	1,604	SCW_DA	IFAD (100%)
Water cellar	site	25	25	-	-	-	50	4,644	662	17	17	-	-	-	34	SCW_DA	IFAD (100%)
Water pools	site	122	105	73	5	1	306	38,938	5,547	685	604	431	30	6	1,757	SCW_DA	IFAD (100%)
Subtotal Water supply facilities										1,202	1,486	837	184	38	3,748		
3. Drainage ditches																	
Drainage ditches	km	8.2	15.4	12.8	8.8	2.4	47.6	279,143	39,764	330	636	541	382	107	1,995	SCW_DA	IFAD (100%)
Subtotal Climate resilient infrastructure (I)										3,289	4,533	2,737	1,130	394	12,083		
B. Climate resilient infrastructure (Taouy)																	
1. Irrigation facilities																	
Irrigation canals /b	km	2.8	5.6	6.5	2.8	0.9	18.6	450,806	64,217	182	373	444	196	65	1,260	SCW_DA	GOVT
Irrigation canals (Rucheng, GOC) /c	km	15	15	9.86	-	-	39.86	160,440	22,855	347	356	240	-	-	943	SCW_DA	GOVT
Pressure pipelines	km	0.5	0.9	1.1	0.5	-	3	15,600	2,222	1	2	3	1	-	7	SCW_DA	GOVT
Head control and systems	each	1	1	1	1	-	4	4,500	641	1	1	1	1	-	3	SCW_DA	GOVT
Culverts	each	14	29	34	14	6	97	1,800	256	4	8	9	4	2	26	SCW_DA	GOVT
Retaining dam	each	1	2	2	-	-	5	254,400	36,239	37	75	77	-	-	189	SCW_DA	GOVT
Sluices	each	8	17	20	8	3	56	546	78	1	1	2	1	0	5	SCW_DA	GOVT
Bridges, canal crossing structures	each	11	23	27	11	4	76	2,700	385	4	9	11	5	2	31	SCW_DA	GOVT
Subtotal Irrigation facilities										576	825	786	207	68	2,463		
2. Drainage ditches																	
Drainage ditches, (Shimen county, GOC)	km	2	1.34	-	-	-	3.34	1,763,400	251,197	502	337	-	-	-	839	SCW_DA	GOVT
Subtotal Climate resilient infrastructure (B)										1,079	1,162	786	207	68	3,302		
Total										4,368	5,695	3,523	1,338	462	15,385		

Table-2.2: Rural Infrastructure

China H2RDP Design mission Table 5.0. Summary: Rural infrastructure																Oth	
Detailed Costs																	
Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						Disb.		
	2021	2022	2023	2024	2025	Total			2021	2022	2023	2024	2025	Total	Acct.	Fin. Rule	
I. Investment Costs																	
A. Rural infrastructure																	
1. Rural roads																	
Village roads	km	55.22	64	39.46	23	12	193.68	441,963	62,958	3,520	4,182	2,643	1,579	844	12,768	CW_DA	GOVT
Earth Road	km	47	67.8	47.94	28.27	17	208.01	301,728	42,981	2,045	3,024	2,192	1,325	817	9,403	CW_DA	GOVT
Production Road	km	41.9	64.8	43.4	28.9	12.7	191.7	388,131	55,289	2,346	3,718	2,553	1,742	785	11,143	CW_DA	GOVT
Subtotal Rural roads										7,911	10,924	7,387	4,646	2,446	33,314		
2. Drinking water supply																	
Water pipelines	km	40.6	32	11	4	2	89.6	163,654	23,313	958	774	273	102	52	2,159	CW_DA	GOVT
Water source engineering	work	32	39	13	1	-	85	80,301	11,439	371	463	158	12	-	1,004	CW_DA	GOVT
Subtotal Drinking water supply										1,329	1,237	431	114	52	3,163		
3. Power supply system																	
Electricity cable lines	km	9	3	-	-	-	12	72,000	10,256	93	32	-	-	-	125	CW_DA	GOVT
Transformers	each	4	1	-	-	-	5	91,800	13,077	53	14	-	-	-	67	CW_DA	GOVT
Subtotal Power supply system										146	46	-	-	-	192		
4. Land development (preparation)																	
Land levelling	ha	243	397	397	120	10	1,167	32,077	4,569	1,124	1,883	1,930	598	51	5,586	CW_DA	GOVT
Land terracing	ha	44	94	93	43	10	284	37,511	5,343	238	521	529	251	60	1,598	CW_DA	GOVT
Subtotal Land development (preparation)										1,362	2,404	2,458	848	111	7,184		
5. Environmental improvements	lumpsum									1,838	2,913	2,327	1,493	1,144	9,716	CW_DA	GOVT
Total Investment Costs										12,586	17,524	12,604	7,102	3,753	53,569		
II. Recurrent Costs																	
A. Operations and maintenance																	
O&M groups	lumpsum	39	35	21	14	12	121	50,000	7,123	278	249	150	100	85	862	OPC_DA	BEN (50%)
Persons trained	per year	453	508	468	292	216	1,937	150	21	10	11	10	6	5	41	OPC_DA	BEN (50%)
Total Recurrent Costs										287	260	160	106	90	903		
Total										12,874	17,784	12,763	7,208	3,843	54,472		

Table-3.1: Project management, M&E, KM and Policy

China

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Table 6. Summary: Project Management, M&E, KM and Policy

Detailed Costs

	Unit	Quantities					Total	Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Total
		2021	2022	2023	2024	2025				2021	2022	2023	2024	2025	
I. Investment Costs															
A. PMO															
1. PMO															
a. Technical assistance															
Office equipment	set	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thematic specialists	lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71
RBL verification service	Lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71
Subtotal Technical assistance										28	28	28	28	28	142
b. Training															
Management workshop & training	lumpsum	1	1	1	1	1	5	340,000	48,433	48	48	48	48	48	242
Gender focus training	lumpsum	1	-	-	-	-	1	150,000	21,368	21	-	-	-	-	21
Monitoring & evaluation	lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71
Agri-business related training	lumpsum	1	1	1	1	1	5	80,000	11,396	11	11	11	11	11	57
Subtotal Training										95	74	74	74	74	392
c. Knowledge management															
National study tours	lumpsum	1	1	1	1	1	5	156,000	22,222	22	22	22	22	22	111
Knowledge documents & sharing	lumpsum	1	1	1	1	1	5	240,000	34,188	34	34	34	34	34	171
Subtotal Knowledge management										56	56	56	56	56	282
d. WF capacity building															
WF capacity building	lumpsum	1	1	1	1	-	4	67,500	9,615	10	10	10	10	-	38
Knowledge document & sharing	lumpsum	1	1	1	1	1	5	110,000	15,670	16	16	16	16	16	78
Subtotal WF capacity building										25	25	25	25	16	117
e. UNWomen Technical Support															
Capacity Development & Empowerment	lumpsum	1	1	1	1	-	4	526,500	75,000	75	75	75	75	-	300
f. Monitoring and evaluation															
Baseline survey	lumpsum	1	-	1	-	1	3	200,000	28,490	28	-	28	-	28	85
MIS set up	lumpsum	1	-	-	-	-	1	800,000	113,960	114	-	-	-	-	114
Policy activities	lumpsum	-	1	1	1	1	4	250,000	35,613	-	36	36	36	36	142
Subtotal Monitoring and evaluation										142	36	64	36	64	342
Subtotal PMO										423	295	323	295	239	1 575
B. Prefecture office (Xiangxi)															
1. Prefecture PMO															
a. Equipment and materials															
b. Workshops and training															
Management workshop & training	lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71
Gender focus training	lumpsum	1	-	-	-	-	1	100,000	14,245	14	-	-	-	-	14
Monitoring & evaluation	lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71
Agri-business-related training	lumpsum	1	1	1	1	1	5	60,000	8,547	9	9	9	9	9	43
Subtotal Workshops and training										51	37	37	37	37	199
c. Knowledge management events															
National study tours	prefecture	1	1	1	1	1	5	50,000	7,123	7	7	7	7	7	36
Knowledge documents & sharing	prefecture	1	1	1	1	1	5	50,000	7,123	7	7	7	7	7	36
Subtotal Knowledge management events										14	14	14	14	14	71
d. WF Capacity building															
WF capacity building	lumpsum	1	1	1	-	-	3	-	-	-	-	-	-	-	-
Knowledge documents & sharing	lumpsum	1	1	1	1	1	5	-	-	-	-	-	-	-	-
Subtotal WF Capacity building										-	-	-	-	-	-
e. Monitoring and evaluation															
Policy studies	lumpsum	-	1	1	1	1	4	62,500	8,903	-	9	9	9	9	36
Subtotal Prefecture PMO										66	60	60	60	60	306

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Table 6. Summary: Project Management, M&E, KM and Policy

Detailed Costs

	Unit	Quantities					Total	Unit Cost	Unit Cost	Totals Including Contingencies (US\$ '000)					Total
		2021	2022	2023	2024	2025		(CNY)	(US\$)	2021	2022	2023	2024	2025	
C. County PMOs															
1. Office equipment															
Office equipment /a	lumpsum	10	-	-	-	-	10	239,000	34,046	340	-	-	-	-	340
2. Staff training															
a. National training															
Project management training	pers_days	50	50	50	50	50	250	1,000	142	7	7	7	7	7	36
FM & procurement training	training	40	40	40	40	40	200	1,000	142	6	6	6	6	6	28
Gender related training	pers_days	50	-	50	-	50	150	1,000	142	7	-	7	-	7	21
Environmental safe guard training	pers_days	50	-	50	-	50	150	1,000	142	7	-	7	-	7	21
Technical training	pers_days	100	100	100	100	100	500	1,000	142	14	14	14	14	14	71
Subtotal National training										41	27	41	27	41	178
b. workshops and meetings															
Workshops & meetings	event	20	20	20	20	20	100	5,000	712	14	14	14	14	14	71
c. Project study tours															
Study tours within the Province	persons	-	100	150	150	100	500	1,000	142	-	14	21	21	14	71
Outside the Province	persons	-	50	50	50	50	200	7,000	997	-	50	50	50	50	199
Subtotal Project study tours										-	64	71	71	64	271
Subtotal Staff training										56	105	127	113	120	520
3. TA and short-term staff															
TA consultants	lumpsum	10	10	10	10	10	50	40,000	5,698	57	57	57	57	57	285
Short-term staff	pers_month	20	20	20	20	20	100	7,100	1,011	20	20	20	20	20	101
Subtotal TA and short-term staff										77	77	77	77	77	386
4. M&E and knowledge management															
a. Monitoring & evaluation	lumpsum	10	10	10	10	10	50	70,000	9,972	100	100	100	100	100	499
b. Knowledge maanagement	lumpsum	10	10	10	10	10	50	43,400	6,182	62	62	62	62	62	309
Subtotal M&E and knowledge management										162	162	162	162	162	808
5. Planning and design															
Planning and design	lumpsum	10	10	10	10	10	50	496,000	70,655	707	707	707	707	707	3 533
Subtotal County PMOs										1 341	1 051	1 072	1 058	1 065	5 587
Total Investment Costs										1 830	1 406	1 456	1 413	1 364	7 468

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Table 6. Summary: Project Management, M&E, KM and Policy

Detailed Costs		Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						
		2021	2022	2023	2024	2025			Total	2021	2022	2023	2024	2025	Total
II. Recurrent Costs															
A. PMO															
staff salaries /b	lumpsum	1	1	1	1	1	5	400,000	56,980	57	57	57	57	57	285
Travel costs	year	1	1	1	1	1	5	200,000	28,490	28	28	28	28	28	142
Office operating costs	year	1	1	1	1	1	5	200,000	28,490	28	28	28	28	28	142
Vehicle renting	year	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71
Subtotal PMO										128	128	128	128	128	641
B. Prefecture PMO															
1. Travel costs	staff year	1	1	1	1	1	5	50,000	7,123	7	7	7	7	7	36
2. Office Operating costs	year	1	1	1	1	1	5	10,000	1,425	1	1	1	1	1	7
3. Vehicle hiring costs	year	1	1	1	1	1	5	50,000	7,123	7	7	7	7	7	36
Subtotal Prefecture PMO										16	16	16	16	16	78
C. Counties															
1. Staff salary (3 staff in each county)															
Staff salary	per annum	30	30	30	30	30	150	66,666	9,497	285	285	285	285	285	1 424
2. Other operating costs															
Vehicle hiring charges	per year	10	10	10	10	10	50	96,000	13,675	137	137	137	137	137	684
Office operating costs /c	per year	10	10	10	10	10	50	335,400	47,778	478	478	478	478	478	2 389
Subtotal Other operating costs										615	615	615	615	615	3 073
Subtotal Counties										899	899	899	899	899	4 497
Total Recurrent Costs										1 043	1 043	1 043	1 043	1 043	5 217
Total										2 873	2 449	2 499	2 456	2 407	12 685

\a such as laptops, desk-tops, projector, printers, photo-copiers, digital camera, etc

\b 5 staff

\c Including electricity, communication, travel, water, stationary, allowances, etc

China

Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 4: Economic and Financial Analysis

Mission Dates: 27/04/2020 22/05/2020
Document Date: 12/10/2020
Project No. 2000002359
Report No. 5499-CN

Asia and the Pacific Division
Programme Management Department

Annex-4: H2RDP Economic and financial analysis

A. Introduction

1. H2RDP will commence implementation in 2021 and complete in Sept 2025 covering 127 administrative villages, 66 townships falling in 10 counties of Hunan province. With the implementation of H2RDP interventions, there would be significant changes in land use, production patterns, households' incomes and overall well-being of the participating households. These aspects are examined under the economic and financial analysis (EFA).

2. **Approach and methodology for EFA:** Cost-benefit analysis method was used for carrying out the economic and financial analysis of H2RDP at its design stage. All incremental investment costs and incremental benefits were adjusted to current prices of June 2020. Incremental benefits were estimated based on physical outputs and likely chances of building up of incremental benefits during the project life period. Prices were collected for all inputs and output commodities from the respective county markets and adjusted them to farm-gate prices using standard conversion factor. Data compiled by the respective county PMO have been used as basic sources of reference. Using all available data, both primary and secondary, type production models for BP enterprises, women/youth start up activities, irrigated agriculture and land development, rural infrastructure etc were developed: from these "production models" to "household or area or activity modules", thereafter aggregated "subproject models" and finally leading to "the project models" using the FARMOD software.

3. Notional benefits that have been accruing as a result of improvement of village roads and provision of village water supply units have also been estimated and accounted for in the EFA. This Annex-4 provides a detailed analysis of EFA of H2RDP and examines its key features briefly. Major interventions under H2RDP and number of participating households are given in Table-1 below.

Activity	Unit	2021	2022	2023	2024	2025	Total
Inclusive private sector development:							
BP (NEE) 1/	#	83	86	70			239
Women/youth startup 2/	#	104	117	96			317
Professional farmer training	pers	1,000	1,000	1,000	1,000	1,000	5,000
Climate smart infrastructures							
Irrigation canal + pipelines	km	63.3	84.5	48.5	20.4	7.9	224.5
Water supply pumping stations	#	6	9	5	2	1	23
Rural Infrastructure:							
Land development	mu	4,305	7,365	7,350	2,445	300	21,780
Rural roads	km	144.12	196.6	130.8	80.17	41.7	593.39
Domestic water supply pipelines	Km	40.6	32.0	11.0	4.6	2.0	90.2

B. Financial Analysis

(i) Assumptions and observations

- In all 72,500 poor and ethnic households receive the H2RDP services directly. The participating households respond to the introduction of new business packages of practices, improved irrigation practices and crop varieties and cultivation techniques as proposed in PDR.

- The households organised themselves in to viable community institutions such as Village Implementation Groups (VIGs), professional farmers' groups, water user groups, infrastructure maintenance groups etc through training and capacity building provided by the project and effectively participate in project implementation.
- There are over 648 collectives or cooperatives in the project area districts that are involved in multifarious activities including agricultural production, primary processing, trading, inputs supply, rice trading, etc. There is potential that these could be, with proper training and mentoring, improved or developed in to viable business entities.
- Participating households, on the basis of training and capacity building and guidance of the county PMO, organise themselves in to new economic entities for business planning (BP) and development either at village, township or county levels
- Women and youth organise themselves in to groups for various business start up interventions that are promoted and supported by the project.
- Private sector take active participation in the promotion and development of BP and women/youth business startups both in co-financing and management.
- The BPs and start up units are supported, mentored and monitored by the business incubation centres that are fully supported by the project
- The inclusive rural services facilities provide smart climate services, epidemic prevention and mitigation, inputs supply facilities and collectives services facilities that are supported by the project and these would significantly improve the overall sustainability of the various project interventions
- Crop productivity improved through adoption of improved packages of practices that are demonstrated to the households, use of quality of seeds and seedlings, weeding, mulching, use of improved farm tools and implements.
- County and township agricultural extension units play significant role in providing technical services, training and capacity building to farmers.
- Participating households respond to a number of climate resilient infrastructure facilities such as irrigation improvement, water supply facilities and provision of village drainage ditches and also undertake the responsibility of the operation and maintenance of these facilities
- Improved road connectivity and other attendant facilities enable participating households to realise increased margins for their farm produce and sale of farm produce.
- Participating households respond very favourably for the various improved water supply facilities proposed under the project.
- For the purposes of O&M of various infrastructure facilities, users organised themselves into groups and user charges collected for water supply, use of electricity etc.
- An average wage rate of CNY 150/person/day for both male and female labour has been assumed although the farm-wages tended to vary;

- A wage rate of CNY 150/day has been assumed for “proxy labours” under without project situation for such new interventions under the project.

(ii) Following **production** models were developed and used in the EFA:

BP (NEE) enterprises	Women/Youth startups	Irrigated crops (one mu)	Land development (one mu)	Rural infrastructure
-Fruits business -Herbal products -Vegetables business -Livestock products -Tea oil business -Fishery products -Tea leaves business -Rice trading	-Fruits & vegetables retailing -Community shop -Eco-tourism as hypothetical models	Rice Corn Pepper Vegetables, etc	Cash and perennial crops	-Rural roads -Domestic water supply units

Details of the BP enterprises and women/youth production models are presented in Appendix-4 at the end of this Annex.

(iii) Household, Area or Farm Models

4. **Household, area and activity models:** Using production budgets from a range of crops, and activities, several “area and farm models and activity models” were prepared to broadly illustrate the H2RDP’s “expected impacts” on the incomes, and use of household labour adopting and/or adapting both on-farm and non-farm during the reminder period of the project. Results of financial analysis of each module shown in Appendix-3 of this Annex are summarised below:

5. **BP enterprises model:** The model is based on the existing operations of some of the cooperatives or collectives. In all details were collected from 18 cooperative enterprises from three counties. These enterprises deal in trading of fruits, medicinal herbal products, vegetables, livestock products, tea oil production and processing, fishery products, tea, rice trading, marketing etc. Each enterprise or collective has a basic organisation structure as stipulated by local government legal requirement. The structure includes governing council, supervisory committee, chairperson, secretary, finance officer and an operations officer supported by technical and marketing sections. On an average a collective has some 37 members including 11 women. The number of members ranges from 11 members (in Shaodong county) to 102 (in Daxiang county). A cooperative engages some 65 persons on its roll but number of persons varies across counties and the cooperatives.

6. According to data collected from these 18 cooperative enterprises, on an average their annual turnover is CNY 56.21 million and annual expenditure is CNY 49.30 million, which includes raw materials procured, salary and wages to the employees, payment of turnover tax approximately at 5%, interest charges payable to banks, etc.

7. The project model is based on the above mode of operations but in addition the BP may have to incur other operating costs, utilities, transport and storage expenses, etc. Each BP also receives project support fund as a grant and in addition the private sector also co-finance the BP operations. On an average each BP receives some CNY 864,078 from IFAD sources and CNY 645,985 from GOC as grant. The private sector participation will be CNY 584,367. The project support would also include staff training and capacity building, mentoring and monitoring of the performance of each BP. Details are presented in Appendix-3.1

8. **Women/youth startups model:** As this is a new venture, the model has been developed using hypothetical norms and assumptions. Each startup will have 6 members of either women or youth or both. The project provides financial support, training and capacity building, mentoring etc. Each start up will receive the project financial assistance of CNY 120,000. The hypothetical model (such as fruits and vegetables retail shop, eco-tourism, community multi-purpose shop, etc) will generate CNY 935,000 per year, a total expenditure of

CNY 761,900 and net income of CNY 173,200. Although the net income is low, the participating members receive salaries totalling to CNY 126,000/year. Details are presented in [Appendix-3.2](#)

9. **Irrigated farm model:** There are two types of irrigation works supported under the project: lining of existing canals and construction or improvement of existing ponds and also the facilities of pressure pipe lines. Average size of land area has been assumed as 1.2 mu¹. Mostly irrigated rice or replacing low yielding crop varieties with high yield varieties are taken up. From observed results, productivity increases are in the range of 10 to 15% of rice or rain-fed crops replaced by rice. Other crops being pepper, corn, Chinese vegetables etc. Operational details are presented in [Appendix-3.3](#)

10. **Land development crop module:** Size of a module is 0.53 mu per household. Major cash crops are tea, fruit crops such as citrus, new planting of kiwi, better maintenance of grapes and other fruits, vegetables, medicinal herbs, Chinese Lily, etc. Increased incomes accrued as a result of productivity increases of existing crops due to better farm management and replacement of low value field crops with high value crops. Kiwi replaced corn, vegetables, soy bean etc. [See Appendix-3.4.](#)

11. **Infrastructure models:** There are two interventions under rural infrastructure: (i) rural roads and (ii) domestic water supply. For the purposes of assessing the economic benefits, only irrigation models were considered as benefits from domestic water supply and roads are notional. There are three types of rural roads constructed: village road, production road and earth road. On the basis of an earlier survey conducted at the time of HARIP PCR, each KM of road saves some 716 person-days of labour per year per km due to improved access, mobility and creation of all-weather communication. A km of road caters to some 90 households. Improvement in domestic water supply leads to labour saving of 40 person-days per household per year and each pumping station estimated to cater to some 1205 households. Details are presented in [Appendix-3.5 and 3.6](#)

12. Results of the above household modules are summarised in Table-3 below:

Household Module	Gross Income (CNY)	Input Cost (CNY)	Labour (CNY)	BCR (ratio)	FIRR (%)	NPV at 12% (CNY)
-BP enterprises 1/	2771,100	1359,700	-	-	35%	5,220,490
-Women/youth startups 2/	935,000	761,900	-	-	73%	905,390
-Irrigated agriculture 3/	2,090	-	-	-	-	15,786
-Land development 4/	7,879	683	816	-	-	39,750
-Rural roads 5/	71,600	-	22,000	-	-	348,992
-Domestic water supply 6/	4,820,000	-	30,000	-	-	35,754,959

1/ each BP has some 45 members both men and women
 2/ each startup group has 6 members women or youth or and both
 3/ each household has 1.2 mu of existing facilities
 4/ each household has 0.53 mu
 5/ each KM of rural road has 90 households as direct beneficiaries
 6/ each pumping station has 1,205 households as direct beneficiaries

(iv) Sub-project models

13. **Subproject modules are aggregates of household modules.** Area, activity and farm modules were grouped and aggregated into THREE sub-project models in order to assess the overall project performance. The results of aggregated economic and financial budgets of each subproject produced in [Appendix-2](#) are outlined below.

(i) BP enterprises and women and youth startup subproject: This subproject covers 10,620 households operating 238 BP units and 1902 households operating 317 startup units. The schedule of implementation of BP units is 83,86 and 70 in year 1 to 3. Number of women/youth start units is proposed to be implemented 104, 117 and 96 in year 1 through 3. It is assumed that about 80% households adopt the new packages that are introduced to them; Benefits will accrue in years succeeding the implementation. The 20 year cash flows yield 38% IRR and and NPV of CNY 2,224.65 million. Operational details are presented in [Appendix-2.1 and 2.2](#)

¹ 15 mu makes one hectare; one mu equals to 667 m²

(ii) Irrigation and land development subproject: This subproject model included 51,846 households benefited by canal improvement and installation of pressure pipes over a five year period starting from 2021. Total area operated by these households is 62,215 mu. Under this subproject, in addition to irrigation development some 40,768 households operating some 21,780 mu under land development and land terracing are also included. It is assumed that benefits accrue in years succeeding the activities implementation. About 90% of households adopt the irrigation packages and 80% households under land development. This sub-project generates an NPV of CNY 2,906.63 million. Operational details are presented in [Appendix-2.3 & 2.4](#).

(iii) Rural infrastructure (notional benefits) subproject: This sub-project covers nearly all the target groups of households, some 72,500. Adoption rate is 100% as water and road connectivity are critical importance to the communities. Rural roads cover some 53,549 households and 27,722 households under water supply activity. Benefits estimated are based on the value of human labour saved and thus are notional. [Appendix-2.5 and 2.6](#)

14. Results of financial budgets of above THREE subprojects are summarised in Table-4 below.

Sub-project model	Gross income (CNY)	Purchased inputs (CNY)	Labour (CNY)	Net income (NPR)	Number of participating households
Enterprises & startups 1/	766,776	453,220	-	313,561	12,522
Irrigation and land development 2/	356,940	21,275	26,990	307,630	51,846
Rural infrastructure (road & water supply 3/	151,886	13,580	-	138,304	81,270

1/ Generates 38% FIRR and NPV of 2,224.65 million CNY
 2/ Generates 2,906.63million CNY as NPV
 3/ Generates an NPV of 1,443.74 million CNY; these are notional economic benefits

(v) Project models

15. **Taxes:** Cooperatives normally are exempted from tax. Agricultural enterprises are also exempted from some types of taxes, but some are taxable. Two types of taxes are applicable to agricultural enterprises: (i) Value Added Tax (VAT) and Business Operation Tax (BOT) or turnover tax. VAT is levied when an enterprises processes goods it purchased from others, and where value is added before sales. If an enterprise processes its own produces, then the VAT is not applicable. There are different levels of VAT, 13%, 9%, 6% and 0%. But the calculation is a bit complicated. But to make it simple, one may assume 9% on sale of goods. BOT is levied on net profit. For project related type of enterprises, the applicable VAT rate is 20%. However, there are different scenarios where some reduction and exemptions are made, but that is too complicated. For the project interventions (both BPs and women/youth startup) a 5% tax on the turnover has been assumed.

16. **Financial analysis of the H2RDP:** The financial analysis of the entire project yields an NPV of CNY 6,012 million, 55% FIRR and 2.0 BCR. Analysis also includes notional benefits. In the financial analysis CF ratio of both inputs and outputs are assumed at 1. Details are summarised in [Appendix-1.7](#)

17. **Financial benefits to counties or Treasury revenues:** Counties invest all proceeds received from IFAD to the participating communities. But the counties are expected to repay IFAD loan as per the schedule of amortisation as agreed to between GOC, IFAD and the Hunan Province. In addition to USD 60.199 million and counties are also investing on the project interventions but these are a part of ongoing national investments and therefore are not incremental. Assuming that the counties repay the loan amounts in 25 years along with an interest charge of 3.51, a financial statement is prepared. Key assumptions are (i) both BPs and start up pay 5% tax on their annual turnover, (ii) BPs continue to enjoy the credit facilities from banks and paying interest on loans at 5%, (iii) a corporate tax of 5% is applied on the loan interest being received by banks after allowing for expenses on administration, cost of capital, risks, etc. Resulting scenario in 30 years is shown in [Appendix-1.10](#) and summarised below.

	Description	Amount in CNY (million)	Risks
A	Revenue expenditures:		
	County investment of IFAD resources	422.60	Amount fully expended
	Total interest charges payable (30 years)	230.34	Counties guarantee repayment
	Total amount payable to GOC by Counties	652.94	
B	Revenue incomes:		
	Incremental taxes by BPs	552.10	BPs business performance uneven
	Taxes payable by Startups	70.23	Startup business performance uneven
	Corporate taxes by banks	116.14	Reduced borrowing from banks
	Total income revenues	738.47	
	Surplus /Deficit	85.53	

18.

C. Economic analysis

(i) Assumptions

- A twenty year analysis period has been assumed, which included a 5 year project investment period.
- All agricultural inputs and outputs that are traded are valued at prices as of May or June 2020.
- Economic investment costs are net of taxes and price contingencies, credit, etc. All costs directly associated with the incremental production are included in full, including incremental farm inputs and labour.
- Sunk costs or past investments are excluded from the analysis
- A shadow exchange ration of 1 has been assumed although there is some marginal variations
- A standard conversion factors (SCF) of 0.79 and 0.81 is applied to both traded and non-traded items for adjusting financial prices.
- The average financial rural wage rate is taken to be the best estimate of the economic value of labour².
- The analysis includes only on-farm and activity benefits and including attributable benefits from BPs and start ups, irrigated agriculture, cash crops, etc
- Notional benefits emerging from rural roads and domestic water supply systems have also been accounted for in the EFA;
- The analysis employs an Opportunity Cost of Capital (OCC) at 5%, which is the current long-term bond rate in China.

(ii) Costs - Benefits Streams and Analysis

19. The project economic costs were direct expenditures after adjusting for inflation. Recurrent costs for continued operations and maintenance have been included in full. Economic prices for inputs and output models were estimated by applying the conversion factors on the financial prices. Commodity prices³ were collected and compiled by the PPMO, Changsha with the support of the respective county based teams. See economic investment costs are given in Appendix-1.3

20. **Production benefits:** The farm productions are direct output from the respective models. Improved farming practices resulted in productivity increases ranging between 10 and 15%.

21. **Environmental benefits:** All H2RDP interventions yielded substantial environmental benefits but that have not been quantified in the EFA, for the following reasons: (i) beneficiaries have not perceived degradation of their lands as a result of declining soil fertility and soil erosion

² It may be noted that three trends stand out: first, poverty is falling sharply, second, rural wages are rising sharply from CNY 50 at Design of HARIP to CNY 120 at its PCR and now CNY 150/person-day, and third farmers are shifting from low value, high volume crops to superior foods. Another trend has been significant increases in prices of farm outputs but relatively insignificant increases in agricultural inputs. Third aspect has been the introduction of VAT for the value addition at farm level.

³ See Appendix-1.8 containing list of financial and economic prices used in EFA. Data collected by PPMO

and thus underestimate the potential benefits of improved cultivation and farming practices over the longer terms; (ii) cooperatives may not realise the benefits of continuing the group action for sustained agricultural production; and (iii) households may not value the benefits of domestic water supply improving their overall health and reducing drudgery to women and rural road improvement reducing drudgery and enabling improved access to markets.

22. **Project performance indicators:** Cost-benefit analysis yielded an overall IRR of 43% of the project with an NPV at a 5% discount rate of CNY 4,566 million and a BCR of 1.87. A positive NPV under the current Opportunity Cost of Capital of 5%⁴ indicated that the project investments have been robust and sound. See [Appendix-1.1](#) and [1.2](#)

23. The switching value analysis indicated that the project investments are worthy of sustaining a 47% decline in overall benefits or 87% increases in costs. Even under extreme scenario of both costs increased by 25% and benefits declined by 25%, the IRR of H2RDP remains at 12% with CNY 811 million of NPV and BCR value of 1.12. If benefits delayed by two years (in effect, if the project's future production activities such take longer to become fully developed or established) then the IRR declines to 27% with a NPV of CNY 3,737 million and 1.72 BCR.

24. If the notional benefits of rural infrastructure (such as roads and water supply) are excluded from the economic analysis, the NPV is reduced to CNY 3,893 million, with a 37% IRR and 1.98 BCR. Still the project investments are sound and robust.

25. Details presented in Appendix-1 "Project performance indicators" are summarised in Table below.

Table-5: Project performance indicators & Sensitivity analysis

Indicator	Base	Cost Increases by		Benefits down by	
	Case	20%	25%	20%	25%
NPV discounted (million CNY) at 5%	4,566	3,521	3,259	2,608	2,118
BCR, ratio discounted at 5%	1.87	1.56	1.50	1.50	1.41
IRR %	43%	31%	28%	28%	24%

26. Key drivers of the economy of the project area are (i) BP and startup activities that generates about CNY 423 million/year with a participation of some 12,522 households and (ii) irrigated agriculture that generates a revenue of CNY 193 million/year participated by 51,846 households. The income distribution between subprojects highly is skewed in favour of a small group of beneficiaries and uneven.

D. Benefits and Beneficiaries

27. **Beneficiaries:** The project will cover some directly 72,500 households from 117 villages and 60 townships falling in 10 counties in Hunan province. But data sources are sketchy and in dodgy and unable to provide reliable information. It is estimated that about some 10,000 households could be indirect beneficiaries.

28. **Benefits:** Immediate benefits are increased productivity through the introduction of better management and improved farming practices. This response is expressed as increased household incomes: from CNY 0 at baseline to CNY 6,225 at end of the project implementation. Given the project growth trend, average household income is expected to reach CNY 10,470 at full development stage. Incremental labour-demand has been estimated at 6 person-days per household at full development.

Detail	Baseline	At project completion	At full development a/
Average net income/household b/	0	6,225	10,470
Labour-days/household	2	5	6

⁴ Discount rate is based on China's long-term bond rate and also Central Bank lending rate

a/ Likely from year 7 or 8
b/ incomes attributable to H2RDP interventions and no other external incomes accounted

Other benefits also came from the H2RDP's capacity building interventions. First, all participating villages have the benefit and advantages of the services of their cooperatives, startup groups, user groups which were capacitated and provided fund support for various social and economic developments and also the services from the incubation centres. Secondly, women from the poor and very poor groups participated in and managing their social and economic development and have better access to infrastructure and inputs supply. Thirdly, the new economic interventions triggers enhanced agricultural production and better prices.

29. **EX-ACT Greenhouse gas emission:** As the project has significant in tree and perennial crops and these are replacing annual crops and also planting these crops on sloping land, there are significant environmental benefits in carbon sequestration. In addition, 21,780 uneven farm land brought under land development and terrace construction. This was quantified using FAO's EX-ACT software and its results shown in Annex-H and accordingly, **tCO₂ eq** is -17.2 for biomass and -2.7 for soils per year per ha in the project area.

30. **Other environmental benefits:** Overall, the project is environmentally favourable with the planting and maintenance of permanent tree crops. These would enhance organic carbon contents of soil. All village roads were improved using the existing road alignments and no cutting or excavation of new road alignments were made. In addition these road improvement works included adoption of climate resilient features such as protection of side slopes, construction of cross-drainage structures, side drains, etc. All on-farm water channels were lined and thus minimising soil and land erosion. Provision of lined drainage canal in the low-lying area in particular where tea was planted ensure safe disposal of floods and minimising damages to land.

E. Risks and sustainability

31. There were a number of risks associated with H2RDP. These were relating to farm technology, reluctance on the part of the farmers to accept the new technology readily, inadequate extension and market linkages and poor price margins, lack of institutional credit, lack of service providers and institutional support and policy risks. Although these issues and risks were addressed adequately during implementation, some still remains unaddressed as described below

Risks	Risk description	Probability of occurrence	Mitigation measures adopted by H2RDP	Had no corrective measures adopted, H2RDP performance would have been as below
Institutional	Delay in technology transfer/lack of quality planting materials slowing down the uptake rates and production and upscaling	High to Medium	Extensive training and demonstrations of crop cultivations, etc were taken up Professional farmers selected and trained	Benefits lag by 2 years: IRR= 27% NPV= 2,737 million BCR=1.72
	Lack of financial capacity to invest in agriculture enterprises and other occupations by the farmers	High to Medium	Cooperatives organised and were encouraged to address the financial issues of their members; this risk continues to exist	Decline in benefits by 20%: IRR=28% NPV=2,608 million BCR= 1.5

Risks	Risk description	Probability of occurrence	Mitigation measures adopted by H2RDP	Had no corrective measures adopted, H2RDP performance would have been as below
Market	Inadequate profit margins due to poor access, lack of transport and of market information	High to medium	<i>Road communications improved and labour-saving interventions introduced</i>	Decline in benefits and increases in cost by 15%: IRR= 23% NPV=2313 million BCR=1.38
	Lower market prices for commodities	Medium	Diversified production, production of off-season crops and commodities encouraged such medicinal herbs and fruit crops	
Policy	Lack of commitment to investing in the welfare development and slowing down funds flow	Low	Provincial government is committed and also enhanced its contributions significantly	Farm operating costs increase by 20%: IRR=31% NPV= 3,521million BCR=1.56
Others	Remoteness of villages and difficulty of access during bad-weather seasons	High	Promotion of products that combine high margin for small volumes and easy to transport was emphasised and supported; training of professional farmers for extension enhancement	Decline in benefits by 25%: IRR= 24% NPV=2118 million BCR=1.41
	Climate change risks of delayed and abnormal rainfall, drought, floods, frosts, snowfall etc	Medium	Training farmers on climate change risks and crop diversification	

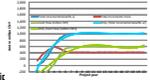
EFA framework summary of H2RDP, China

CHINA HUNAN RDP PROJECT DETAILED DESIGN

A)		Net incremental benefits of Farm and Activity subproject models (amount in 000 INR)							
FINANCIAL ANALYSIS	Enterprises	Irrigation + land	Infrastructure						
	PP1	0	0	0	0	0	0	0	0
PP2	1,48,547	48,838	35,720						
PP3	-2,06,498	1,23,907	88,368	0	0	0	0	0	0
PP4	1,32,099	1,86,374	1,18,615						
PP5	1,26,778	2,36,222	2,26,222	0	0	0	0	0	0
PP6	2,78,783	2,73,188	1,37,959	0	0	0	0	0	0
PP7	3,13,562	2,91,919	1,37,959	0	0	0	0	0	0
PP8	3,13,562	3,03,286	1,37,959	0	0	0	0	0	0
PP9	3,13,562	3,06,804	1,37,959	0	0	0	0	0	0
PP10	3,13,562	3,07,626	1,37,959	0	0	0	0	0	0
PP11	3,13,562	3,11,838	1,37,959	0	0	0	0	0	0
PP12	3,12,732	3,07,327	1,37,959	0	0	0	0	0	0
PP13	3,12,622	3,06,804	1,37,959	0	0	0	0	0	0
PP14	3,12,782	3,06,804	1,37,959	0	0	0	0	0	0
PP15	3,13,562	3,07,626	1,37,959	0	0	0	0	0	0
PP16	3,13,562	3,11,838	1,37,959	0	0	0	0	0	0
PP17	3,13,562	3,07,327	1,37,959	0	0	0	0	0	0
PP18	3,13,562	3,06,804	1,37,959	0	0	0	0	0	0
PP19	3,13,562	3,06,804	1,37,959	0	0	0	0	0	0
PP20	3,13,562	3,07,626	1,37,959	0	0	0	0	0	0
NPV (CNY, 000)	9,34,581	15,47,075	8,34,006	0	0	0	0	0	0
NPV (USD 000)	1,33,193.1	2,20,381.0	1,18,804.3	0	0	0	0	0	0
FIRR	38%	#DIV/0!	#DIV/0!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!

D)

BENEFICIARIES, PHASING BY INTERVENTION AND ADOPTION RATES						
Project year	2021	2022	2023	2024	2025	Total
Interventions	Project implementation period incremental					Adoption rates
# of BP households (adopting th)	3,735	3,870	3,150	0	0	10,755
# of Women and youth startup households (adopting th)	2,889	3,096	2,520	0	0	8,604
# of irrigated farms households (adopting th)	634	702	676	0	0	2,000
# of land development households (adopting th)	499	552	461	0	0	1,522
# of infrastructure households (roads) (adopting th)	14,914	19,430	11,553	4,201	2,625	52,723
# of infrastructure households (DWS) (adopting th)	13,423	17,487	10,398	3,781	2,363	47,451
Total # of particip	8,148	13,852	13,853	4,888	0	40,741
Total # of adopting nouseholds	6,518	11,082	11,082	3,910	0	32,599
Total # of adopting nouseholds	13,005	17,694	11,772	7,215	3,753	53,439
Total # of adopting nouseholds	7,230	10,845	6,025	2,410	1,205	27,715
Total # of adopting nouseholds	7,230	10,845	6,025	2,410	1,205	27,715



F)

SENSITIVITY ANALYSIS (SA)				
Baseline scenario	Δ%	Link with the risk matrix	IRR	NPV I/
Project benefits +	-10%	benefits decline by 10%	36%	3,587
Project costs +	10%	costs increase by 10% and benefits decline by 10%	30%	3,064
Project benefits (-)	10%	costs increase by 10% and benefits decline by 10%	30%	3,064
2 years lag in benefits		delay in achieving the projected benefits by 2 year period	27%	3,737
Project benefits	-20%	climate risks, frost, drought, floods etc	28%	2,608
Input prices	10%	lack of policy commitment	37%	4,043

I/ NPV is in million CNY discounted at 5%

B)

PROJECT COSTS AND INDICATORS FOR LOGFRAME					
TOTAL PROJECT COSTS (in million USD)	172.97	Base costs	167.01	PMU alone	1.92
Number of Beneficiaries	72,500 Households	Villages	# of BPs	# of startups	# of irrigation th
Cost per beneficiary (IFAD resources \$69.159 million)	830 USD/ household	127	239	317	51,846
Outreach	72,500	Adoption rates	91%		
Components	Cost USD M	Outcomes	Indicators		
Inclusive private sector investment	90.73	12,520 private sector entities participating	enhanced margins in BP activities		
Climate proofed public infrastructure	69.88	more than 51,850 households participating	increased agricultural production		
Project management, M&E, KM	12.38	staff in position through the project period	WA submitted and audits conducted on time		
Total	172.97				

C)

MAIN ASSUMPTIONS & SHADOW PRICES ^{a/}				
Output, production	Incremental value (%)	Price (in CNY)	Input prices	Price (CNY)
Rice, pepper	15%	Rice 6/kg	seeds	6 to 8/kg
Soybean	10%	Soybean 6/kg	Fertilisers, compound	3
Medicinal herbs	15%	vegetables 4/kg	organic /manure, dung	2/kg
Tea	10%	Fruits 8/kg	Rural wage rate, pers, day	150/day
Oranges	10%	Tea 20 & 80/kg	Pesticides	60/lit
Vegetables	15%	Medicinal herbs 35/kg	PRC	250/mt
Official Exchange rate	7.02	Discount rate (opportunity cost of capital)		5.0%
Shadow Exchange rate	7.02	Long term bond rate, Central Bank rate		5.0%
Standard Conversion Factor	1.00	Output conversion factor a/		0.79
Labour/Conversion factor	0.8	Input Conversion factor a/		0.83

^{a/} All prices expressed in CNY. Currency unit. a/ estimated from Farmod data

E)

ECONOMIC ANALYSIS	Project year	NET INCREMENTAL BENEFITS (CNY million)					NET INCREMENTAL COSTS (CNY million)			Cash Flow (million CNY)
		Cooperatives (BP entities)	Irrigation & land development benefits	Infrastructure national benefits	Proxy labour	Other	Total incremental benefits a/	Economic Investment Costs	Economic recurrent Costs	
1	0.00	0.00	0.00	0.00	0.00	0.00	154.0	0.0	154.0	-154.0
2	36.75	56.85	19.6	-2.2	0.0	110.1	199.0	169.2	368.8	-257.6
3	158.89	143.79	48.4	-3.3	0.0	349.4	140.9	357.2	496.2	-122.5
4	170.33	222.52	40.1	-8.2	0.0	424.7	86.4	509.7	596.2	84.4
5	137.18	264.64	72.8	-8.9	0.0	360.7	53.6	480.4	534.0	311.7
6	616.47	292.12	75.9	-8.9	0.0	975.8	0.0	441.1	441.1	534.7
7	616.47	312.28	75.9	-8.9	0.0	995.8	0.0	416.8	416.8	579.0
8	616.47	323.79	75.9	-8.9	0.0	1,007.3	0.0	417.2	417.2	590.1
9	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	417.2	417.2	593.3
10	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	416.5	416.5	593.9
11	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	413.1	413.1	597.4
12	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	417.4	417.4	593.0
13	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	416.9	416.9	592.5
14	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	417.9	417.9	592.6
15	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	416.1	416.1	593.9
16	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	413.1	413.1	597.4
17	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	416.8	416.8	593.7
18	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	417.2	417.2	593.3
19	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	413.2	413.2	593.3
20	616.47	326.95	75.9	-8.9	0.0	1,020.3	0.0	416.5	416.5	593.9
	NPV at 5% (million)	4,564					Long term Bond rate applied as Discount rate			
	B/C	1.87					9.792			5,226
	ENR	43%								

G)

Annex-A NET INCREMENTAL BENEFITS OF SUBPROJECTS, FINANCIAL

CHINA HUNAN RDP PROJECT DETAILED DESIGN

A)		Net incremental benefits of Farm and Activity subproject models (amount in 000 INR)							
FINANCIAL ANALYSIS		Enterprises	Irrigation + land	Infrastructure					
	PY1	0	0	0	0	0	0	0	0
	PY2	- 1,48,547	48,838	35,720	-	-	-	-	-
	PY3	-2,06,498	1,23,807	88,368	0	0	0	0	0
	PY4	- 1,12,090	1,93,372	1,18,675	-	-	-	-	-
	PY5	1,36,778	2,36,232	2,36,232	0	0	0	0	0
	PY6	2,78,783	2,73,188	1,37,959	0	0	0	0	0
	PY7	3,13,562	2,91,019	1,37,959	0	0	0	0	0
	PY8	3,13,562	3,03,285	1,37,959	0	0	0	0	0
	PY9	3,13,562	3,06,804	1,37,959	0	0	0	0	0
	PY10	3,13,562	3,07,626	1,37,959	0	0	0	0	0
	PY11	3,13,562	3,11,836	1,37,959	0	0	0	0	0
	PY12	3,12,732	3,07,327	1,37,959	0	0	0	0	0
	PY13	3,12,622	3,06,804	1,37,959	0	0	0	0	0
	PY14	3,12,792	3,06,804	1,37,959	0	0	0	0	0
	PY15	3,13,562	3,07,626	1,37,959	0	0	0	0	0
	PY16	3,13,562	3,11,836	1,37,959	0	0	0	0	0
	PY17	3,13,562	3,07,327	1,37,959	0	0	0	0	0
	PY18	3,13,562	3,06,804	1,37,959	0	0	0	0	0
	PY19	3,13,562	3,06,804	1,37,959	0	0	0	0	0
	PY20	3,13,562	3,07,626	1,37,959	0	0	0	0	0
NPV (CNY, 000)	9,34,581	15,47,075	8,34,006	0	0	0	0	0	
NPV (USD 000)	1,33,131.1	2,20,381.0	1,18,804.3	0.0	0.0	0.0	0.0	0.0	
FIRR	38%	#DIV/0!	#DIV/0!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	

Annex-B PROJECT COSTS AND INDICATORS FOR LOGFRAME

PROJECT COSTS AND INDICATORS FOR LOGFRAME						
TOTAL PROJECT COSTS (in million USD)		172.97	Base costs	167.01	PMU alone	1.92
Number of Beneficiaries	72,500 Households	Villages	# of BPs	# of startup	# of irrigation hh	# of road hh
		127	239	317	51,846	53,549
Cost per beneficiary (IFAD resources= \$60.199 million)	830 USD/ household		Outreach	72,500	Adoption rates	91%
Components	Cost USD M	Outcomes		Indicators		
Inclusive private sector investment	90.73	12,520 private sector entities participating		enhanced margins in BP activities		
Climate proofed public infrastructure	69.86	more than 51,850 households participating		increased agricultural production		
Project management, M&E, KM	12.38	staff in position through the project period		WA submitted and audits conducted on time		
<i>Total</i>	172.97					

Annex-C MAIN ASSUMPTIONS AND SHADOW PRICES

PROJECT COSTS AND INDICATORS FOR LOGFRAME						
TOTAL PROJECT COSTS (in million USD)		172.97	Base costs	167.01	PMU alone	1.92
Number of Beneficiaries	72,500 Households	Villages	# of BPs	# of startup	# of irrigation hh	# of road hh
		127	239	317	51,846	53,549
Cost per beneficiary (IFAD resources= \$60.199 million)	830 USD/ household		Outreach	72,500	Adoption rates	91%
Components	Cost USD M	Outcomes		Indicators		
Inclusive private sector investment	90.73	12,520 private sector entities participating		enhanced margins in BP activities		
Climate proofed public infrastructure	69.86	more than 51,850 households participating		increased agricultural production		
Project management, M&E, KM	12.38	staff in position through the project period		WA submitted and audits conducted on time		
<i>Total</i>		172.97				

Annex-D BENEFICIARIES, PHASING BY INTERVENTION AND ADOPTION RATES

D)

BENEFICIARIES, PHASING BY INTERVENTION AND ADOPTION RATES								Adoption rates
Project year	2021	2022	2023	2024	2025	Total		
Interventions	<i>Project Implementation period incremental</i>							
# of BP households <i>(adopting hh)</i>	3,735	3,870	3,150	0	0	10,755	80%	
	2,988	3,096	2,520	0	0	8,604		
# of Women and youth startup households <i>(adopting hh)</i>	624	702	576	0	0	1,902	80%	
	499	562	461	0	0	1,522		
# of irrigated farms households <i>(adopting hh)</i>	14914	19,430	11,553	4,201	2,625	52,723	90%	
	13,423	17,487	10,398	3,781	2,363	47,451		
# of land development households <i>(adopting hh)</i>	8,148	13,852	13,853	4,888	0	40,741	80%	
	6,518	11,082	11,082	3,910	0	32,593		
# of infrastructure households (roads) <i>(adopting hh)</i>	13,005	17,694	11,772	7,215	3,753	53,439	100%	
	13,005	17,694	11,772	7,215	3,753	53,439		
# of infrastructure households (DWS) <i>(adopting hh)</i>	7,230	10,845	6,025	2,410	1,205	27,715	100%	
	7,230	10,845	6,025	2,410	1,205	27,715		
Total # of participating households	47,656	66,393	46,929	18,714	7,583	1,87,275		
Total # of adopting households	43,663	60,765	42,258	17,316	7,321	1,71,323	91%	

Total number of households under the project area villages is 72,500, which is taken as the number of targeted beneficiaries. BP and startup households could also be irrigated farm and land development ho

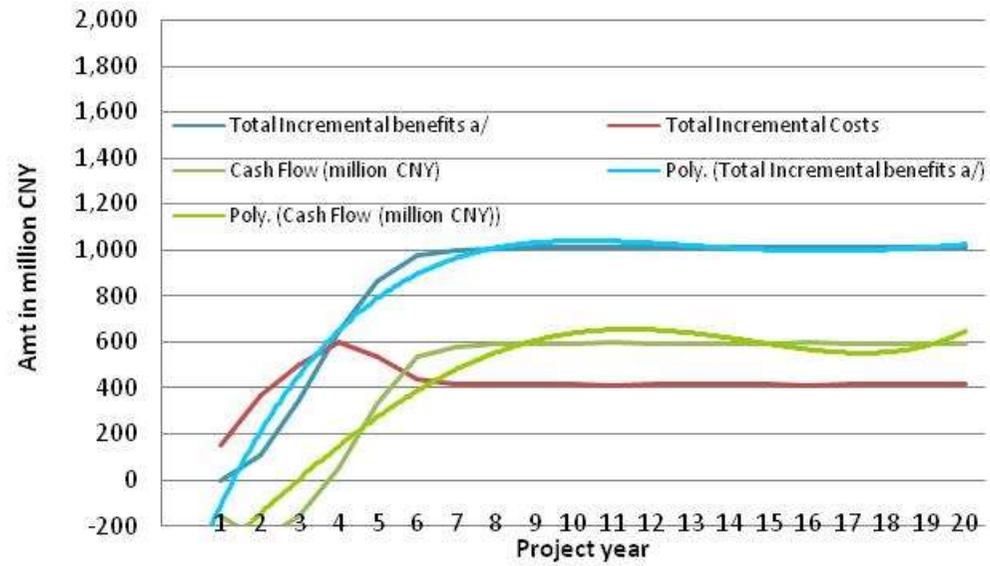
Annex-E: NET INCREMENTAL ECONOMIC BENEFITS & IRR

E)	NET INCREMENTAL BENEFITS (CNY million)								NET INCREMENTAL COSTS (CNY million)			Cash Flow (million CNY)
	Project year	Cooperatives (BP entities)	Irrigation & land development benefits	Infrastructure notional benefits	Proxy labour			Total Incremental benefits a/	Economic investment Costs	Economic recurrent Costs	Total Incremental Costs	
1	0.00	0.00	0.0	0.0	0.0	0.0	0.0	154.0	0.0	154.0	-154.0	
2	36.75	56.95	19.6	-2.2	0.0	0.0	0.0	199.6	169.2	368.8	-257.6	
3	158.64	143.73	48.4	-5.3	0.0	0.0	0.0	140.9	357.2	498.1	-152.6	
4	370.33	223.52	65.1	-8.2	0.0	0.0	0.0	86.6	509.7	596.3	54.4	
5	537.19	264.64	72.8	-8.9	0.0	0.0	0.0	53.6	480.4	534.0	331.7	
6	616.47	292.32	75.9	-8.9	0.0	0.0	0.0	0.0	441.1	441.1	534.7	
7	616.47	312.28	75.9	-8.9	0.0	0.0	0.0	0.0	416.8	416.8	579.0	
8	616.47	323.79	75.9	-8.9	0.0	0.0	0.0	0.0	417.2	417.2	590.1	
9	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	417.2	417.2	593.3	
10	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	416.5	416.5	593.9	
11	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	413.1	413.1	597.4	
12	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	417.4	417.4	593.0	
13	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	418.0	418.0	592.5	
14	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	417.8	417.8	592.6	
15	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	416.5	416.5	593.9	
16	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	413.1	413.1	597.4	
17	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	416.8	416.8	593.7	
18	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	417.2	417.2	593.3	
19	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	417.2	417.2	593.3	
20	616.47	326.95	75.9	-8.9	0.0	0.0	0.0	0.0	416.5	416.5	593.9	
		NPV at 5% ('million)		4,566		Long term Bond rate applied as Discount rate						
		BCR		1.87				9,792		5,226		
		EIRR		43%								

Annex-F SENSITIVITY ANALYSIS

F) SENSITIVITY ANALYSIS (SA)				
	Δ%	Link with the risk matrix	IRR	NPV 1/
Basecase scenario		Normal scenario	43%	4,566
Project benefits	-10%	benefits decline by 10%	36%	3,587
Project costs +	10%	costs increase by 10% and benefits decline by 10%	30%	3,064
Project benefits (-)	10%			
2 years lag in benefits		delay in achieving the projected benefits by 2 year period	27%	3,737
Project benefits	-20%	climate risks, frost, drought, floods, l etc	28%	2,608
Input prices	10%	lack of policy commitment	37%	4,043
1/ NPV is in million CNY discounted at 5%				

Annex-G: GRAPH SHOWING INCREMENTAL BENEFITS, COSTS AND NET INCOME



Annex-H: RESULTS OF FAO EX-ACT ANALYSIS

Project Name	H2RDP		Climate	Warm Temperate (Moist)			Duration of the Project (Years)	20			
Continent	Asia (Continental)		Dominant Regional Soil Type	LAC Soils			Total area (ha)	4621			
Components of the project	Gross fluxes			Share per GHG of the Balance					Result per year		
	Without	With	Balance	All GHG in tCO ₂ eq			N ₂ O	CH ₄	Without	With	Balance
	All GHG in tCO ₂ eq			CO ₂							
	Positive = source / negative = sink			Biomass	Soil	Other					
Land use changes											
Deforestation	0	0	0	0	0	0	0	0	0	0	0
Afforestation	0	-16,71,303	-16,71,303	-14,48,677	-2,22,627	0	0	0	0	-83,565	-83,565
Other LUC	0	-17,266	-17,266	-4,484	-12,782	0	0	0	0	-863	-863
Agriculture											
Annual	0	0	0	0	0	0	0	0	0	0	0
Perennial	0	-1,52,884	-1,52,884	-1,39,801	-13,083	0	0	0	0	-7,644	-7,644
Rice	0	0	0	0	0	0	0	0	0	0	0
Grassland & Livestocks											
Grassland	0	0	0	0	0	0	0	0	0	0	0
Livestocks	0	0	0	0	0	0	0	0	0	0	0
Degradation & Management											
Coastal wetlands	0	0	0	0	0	0	0	0	0	0	0
Inputs & Investments											
Fishery & Aquaculture	21,33,587	19,34,018	-1,99,569	0	0	-1,25,564	-74,005	0	1,06,679	96,701	-9,978
	0	0	0	0	0	0	0	0	0	0	0
Total	21,33,587	92,564	-20,41,022	-15,92,961	-2,48,492	-1,25,564	-74,005	0	1,06,679	4,828	-1,02,051
Per hectare	462	20	-442	-371.9	-53.8	-27.2	-16.0	0.0			
Per hectare per year	23.1	1.0	-22.1	-18.6	-2.7	-1.4	-0.8	0.0	23.1	1.0	-22.1

APPENDIX-1 PROJECT PERFORMANCE INDICATORS AND SENSITIVITY ANALYSIS

Appendix-1.1: Project performance indicators (IRR, NPV & BCR)

ECONOMIC ANALYSIS

Country:	China	Discount rate:DR	0.05	5%
Project:	H2RDP DESIGN			
(amount in million CNY)				

	Project Year																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Incremental benefits																				
Incremental benefits	0.0	111.1	345.4	650.7	865.7	975.8	995.8	1007.3	1010.5	1010.5	1010.5	1010.5	1010.5	1010.5	1010.5	1010.5	1010.5	1010.5	1010.5	1010.5
Total Incremental benefits	0.0	111.1	345.4	650.7	865.7	975.8	995.8	1007.3	1010.5											
Incremental costs																				
Investment costs	154.0	199.6	140.9	86.6	53.6															
Operating costs, inputs	0.0	169.2	357.2	509.7	480.4	441.1	416.8	417.2	417.2	416.5	413.1	417.4	418.0	417.8	416.5	413.1	416.8	417.2	417.2	416.5
Incremental costs	154.0	368.7	498.1	596.3	534.1	441.1	416.8	417.2	417.2	416.5	413.1	417.4	418.0	417.8	416.5	413.1	416.8	417.2	417.2	416.5
Incremental net benefits	-154.0	-257.6	-152.7	54.5	331.6	534.7	579.0	590.1	593.3	593.9	597.4	593.0	592.5	592.6	593.9	597.4	593.7	593.3	593.3	593.9

Basecase results discounted:	5.0%
NPV of benefit streams discounted at	5.0% 9,792
NPV of costs stream discounted at	5.0% 5,226
NPV of project discounted at	5.0% 4,566
BCR- discounted benefits & costs at	5.0% 1.87
IRR	43%

Benefits lagged by 2 year DR at	5.0%
NPV of benefit streams discounted at	5.0% 8,963
NPV of costs stream discounted at	5.0% 5,226
NPV of project discounted at	5.0% 3,737
BCR- discounted benefits & costs at	5.0% 1.72
IRR	27%

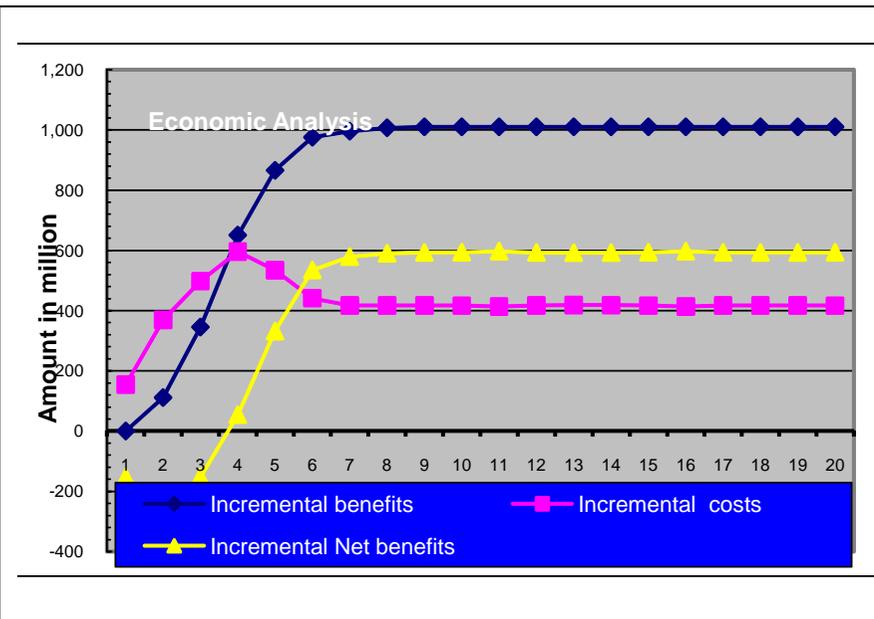
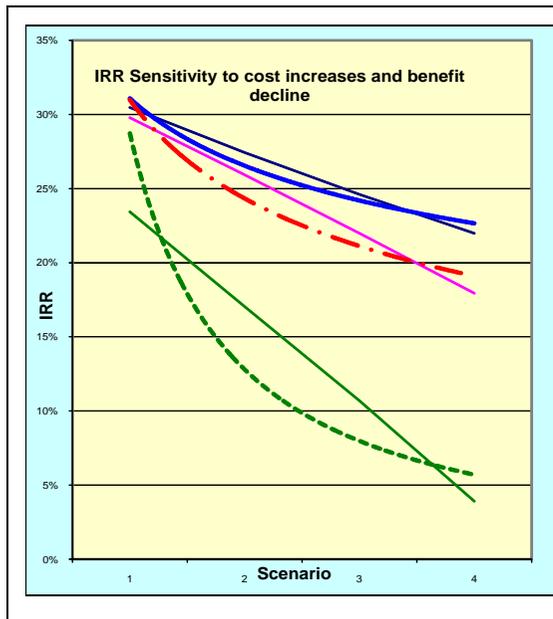
Appendix-1.2: Project sensitivity analysis (Switching values etc...)

Results of Sensitivity Analysis:

Project Performance indicators		Costs increased by				Benefits down by				Both cost increase & benefits down			
		10%	15%	20%	25%	10%	15%	20%	25%	10%	15%	20%	25%
NPV of at discount rate of	5.0%	4,043	3,782	3,521	3,259	3,587	3,097	2,608	2,118	3,064	2,313	1,562	811
BCR at discount rate of	5.0%	1.70	1.63	1.56	1.50	1.69	1.59	1.50	1.41	1.53	1.38	1.25	1.12
IRR		37%	34%	31%	28%	36%	32%	28%	24%	30%	23%	18%	12%

Switching Value Analysis:

Switching Value:	Appraisal	Switching value	% change
Total Benefits at 5% DR	9,792	5,226	-47
Total Costs at 5% DR	5,226	9,792	87



Appendix-1.3: Project investment costs by year

China						
H2RDP Design mission ESTIMATION OF ECONOMIC COSTS						
Expenditure Accounts by Years -- Base Costs	Base Cost (CNY '000)					
	2021	2022	2023	2024	2025	Total
I. Investment Costs						
A. Expenditure accounts						
1. Works	87,424	1,19,282	84,155	46,591	24,417	3,61,869
2. Smart civil work	27,921	36,199	21,665	8,612	2,905	97,302
3. Equipment and materials	2,390	-	-	-	-	2,390
4. Training and workshops	14,012	15,368	13,653	12,339	12,521	67,893
5. Goods, services and inputs	10,455	17,171	10,609	8,547	3,436	50,218
6. Grants and subsidies	1,79,730	1,93,819	1,57,849	-	-	5,31,398
Total Investment Costs	3,21,932	3,81,838	2,87,930	76,089	43,279	11,11,069
II. Recurrent Costs						
A. operating costs						
1. Salaries and allowances	3,658	3,658	3,658	3,658	3,658	18,290
2. Operating costs	8,042	7,850	7,144	6,768	6,656	36,461
3. Operations and maintenance	50	50	50	50	50	250
Total Recurrent Costs	11,750	11,558	10,852	10,476	10,364	55,000
Total BASELINE COSTS	3,33,682	3,93,397	2,98,783	86,564	53,644	11,66,070
Physical Contingencies	-	-	-	-	-	-
Price Contingencies	3,665	13,195	16,629	5,079	3,019	41,588
Total PROJECT COSTS	3,37,347	4,06,592	3,15,412	91,643	56,663	12,07,657
ESTIMATION OF ECONOMIC COSTS	3,37,347	4,06,592	3,15,412	91,643	56,663	12,07,657
TOTAL COSTS						
LESS						
PRICE CONTINGENCIES	3,665	13,195	16,629	5,079	3,019	41,588
GRANTS AND SUBSIDIES	1,79,730	1,93,819	1,57,849	-	-	5,31,398
INPUTS	2,001	2,001	2,001	2,001	2,201	10,206
SUBTOTAL	1,83,395	2,07,014	1,74,478	5,079	3,019	5,72,985
ECONOMIC COSTS	1,53,952.204	1,99,578.031	1,40,933.389	86,564.396	53,643.850	6,34,671.870

Appendix-1.4: Project incremental “benefits and costs streams” economic

CHINA

H2RDP PDR

Project Summary

ECONOMIC BUDGET (AGGREGAT

(In CNY Million)

	Increments																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Production																				
BP Enterprises	-	-	65.2	214.5	354.6	423.4	423.4	423.4	423.4	423.4	423.4	423.4	423.4	423.4	423.4	423.4	423.4	423.4	423.4	423.4
Women, youth startups	-	36.8	93.4	155.8	182.6	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0	193.0
Annual crops	-	22.2	50.5	66.2	72.0	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
Cash crops	-	34.8	93.3	157.3	192.7	216.2	236.1	247.7	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8	250.8
Rural Infrastructure	-	19.6	48.4	65.1	72.8	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9	75.9
Proxy labour	-	-2.2	-5.3	-8.2	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9
Sub-total Main Production	-	111.1	345.4	650.7	865.7	975.8	995.8	1,007.3	1,010.5	1,010.5	1,010.5	1,010.5	1,010.5	1,010.5	1,010.5	1,010.5	1,010.5	1,010.5	1,010.5	1,010.5
Production Cost																				
Investment																				
Purchased Inputs																				
BP enterprises	-	105.8	222.6	311.4	276.1	235.6	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8	207.8
Women/Youth startups	-	48.8	99.2	145.6	148.6	154.8	154.8	154.8	154.8	154.8	155.5	155.6	155.4	154.8	154.8	154.8	154.8	154.8	154.8	154.8
Seeds	-	4.1	11.2	18.3	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
Fertilizers	-	-0.1	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Pest control (IPM)	-	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other inputs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Purchased Inputs	-	158.6	332.6	474.8	445.0	410.6	382.8	382.8	382.8	382.8	382.8	383.5	383.6	383.4	382.8	382.8	382.8	382.8	382.8	382.8
Labor																				
Labour	-	2.8	6.7	9.2	10.7	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1
Sub-total Investment Costs	-	161.4	339.3	484.0	455.7	421.8	394.0	394.0	394.0	394.0	394.0	394.6	394.7	394.6	394.0	394.0	394.0	394.0	394.0	394.0
Operating																				
Purchased Inputs																				
Seeds	-	2.7	4.9	5.1	2.1	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fertilizers	-	-0.0	0.0	0.1	0.1	-0.1	0.1	0.1	0.1	0.1	-0.1	0.1	0.1	0.1	0.1	-0.1	0.1	0.1	0.1	0.1
Pest control (IPM)	-	0.2	0.6	0.9	0.9	0.6	0.9	1.0	1.0	0.9	0.6	0.9	1.0	1.0	0.9	0.6	0.9	1.0	1.0	0.9
Sub-Total Purchased Inputs	-	3.0	5.5	6.1	3.1	0.6	1.0	1.1	1.1	1.0	0.5	1.0	1.1	1.1	1.0	0.5	1.0	1.1	1.1	1.0
Labor																				
Labour	-	4.8	12.4	19.6	21.6	18.6	21.8	22.2	22.2	21.6	18.6	21.8	22.2	22.2	21.6	18.6	21.8	22.2	22.2	21.6
Sub-total Operating Costs	-	7.7	17.9	25.7	24.7	19.3	22.8	23.2	23.2	22.6	19.1	22.8	23.2	23.2	22.6	19.1	22.8	23.2	23.2	22.6
Sub-Total Production Cost	-	169.2	357.2	509.7	480.4	441.1	416.8	417.2	417.2	416.5	413.1	417.4	418.0	417.8	416.5	413.1	416.8	417.2	417.2	416.5
Other Costs																				
Project Costs	154.0	199.6	140.9	86.6	53.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OUTFLOWS	154.0	368.7	498.1	596.3	534.1	441.1	416.8	417.2	417.2	416.5	413.1	417.4	418.0	417.8	416.5	413.1	416.8	417.2	417.2	416.5
Cash Flow	-154.0	-257.6	-152.7	54.5	331.6	534.7	579.0	590.1	593.3	593.9	597.4	593.0	592.5	592.6	593.9	597.4	593.7	593.3	593.3	593.9

IRR = 43.4%, NPV = 4,566.00

Appendix-1.5: Project incremental Production (agricultural activities only)

CHINA H2RDP PDR Project Summary PRODUCTION AND INPUTS (Detailed) (In Units)															
Unit	Increments														
	2	3	4	5	6	7	8	9	10	15	16	17	18 to 19	20	
Main Production															
Corn	kg	134,270	309,140	413,120	450,930	474,560	474,560	474,560	474,560	474,560	474,560	474,560	474,560	474,560	474,560
Pepper	kg	2,181,888	5,023,525	6,713,200	7,327,613	7,711,600	7,711,600	7,711,600	7,711,600	7,711,600	7,711,600	7,711,600	7,711,600	7,711,600	7,711,600
Rice	kg	2,090,960	4,684,520	6,002,060	6,487,140	6,912,480	6,912,480	6,912,480	6,912,480	6,912,480	6,912,480	6,912,480	6,912,480	6,912,480	6,912,480
Straw	kg	1,446,464	3,200,648	4,019,084	4,322,676	4,634,592	4,634,592	4,634,592	4,634,592	4,634,592	4,634,592	4,634,592	4,634,592	4,634,592	4,634,592
Chinese Vegetables	kg	1,678,375	3,864,250	5,164,000	5,636,625	5,932,000	5,932,000	5,932,000	5,932,000	5,932,000	5,932,000	5,932,000	5,932,000	5,932,000	5,932,000
Chinese Lily	kg	195,540	528,000	860,460	977,760	977,760	977,760	977,760	977,760	977,760	977,760	977,760	977,760	977,760	977,760
Grapes	kg	-	-	586,620	1,975,080	4,126,230	5,974,200	7,039,950	7,333,200	7,333,200	7,333,200	7,333,200	7,333,200	7,333,200	7,333,200
Medicinal herbs	kg	977,700	2,640,000	4,302,300	4,888,800	4,888,800	4,888,800	4,888,800	4,888,800	4,888,800	4,888,800	4,888,800	4,888,800	4,888,800	4,888,800
Citrus	kg	391,080	1,056,000	1,720,920	1,955,520	1,955,520	1,955,520	1,955,520	1,955,520	1,955,520	1,955,520	1,955,520	1,955,520	1,955,520	1,955,520
Proxy labour value under WOP	pers_day	-9,400	-19,900	-28,500	-28,500	-28,500	-28,500	-28,500	-28,500	-28,500	-28,500	-28,500	-28,500	-28,500	-28,500

Appendix-1.6: Project incremental Labour (relating to agricultural operations only)

Project Summary LABOR BUDGET (In Units)																					
Unit	Increments																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Labor Requirements																					
Person day	Person day	-	63,258	158,874	240,310	269,340	248,151	274,550	277,631	277,631	272,790	248,151	274,550	277,631	277,631	272,790	248,151	274,550	277,631	277,631	272,790
Land preparation	Person day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Harvesting	Person day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planting	Person day	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Labor Requirements		-	63,258	158,874	240,310	269,340	248,151	274,550	277,631	277,631	272,790	248,151	274,550	277,631	277,631	272,790	248,151	274,550	277,631	277,631	272,790

Appendix-1.7: Project incremental financial benefits (farmers' perspective)

Project Summary																				
FINANCIAL BUDGET (AGGREGATE)																				
(In CNY Million)																				
	Increments																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Production																				
BP Enterprises	-	-	81.5	268.1	443.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3	529.3
Women, youth startups	-	45.9	116.8	194.8	228.2	241.3	241.3	241.3	241.3	241.3	241.3	241.3	241.3	241.3	241.3	241.3	241.3	241.3	241.3	241.3
Annual crops	-	24.7	56.1	73.6	80.0	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6	84.6
Cash crops	-	38.6	103.6	174.8	214.1	240.2	262.4	275.2	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7	278.7
Rural Infrastructure	-	39.2	96.7	130.2	145.6	151.9	151.9	151.9	151.9	151.9	151.9	151.9	151.9	151.9	151.9	151.9	151.9	151.9	151.9	151.9
Proxy labour	-	-2.7	-6.6	-10.3	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1	-11.1
Sub-total Main Production	-	145.7	448.1	831.2	1,100.0	1,236.1	1,258.3	1,271.1	1,274.6	1,274.6	1,274.6	1,274.6	1,274.6	1,274.6	1,274.6	1,274.6	1,274.6	1,274.6	1,274.6	1,274.6
Production Cost																				
Investment																				
Purchased Inputs																				
BP enterprises	-	132.3	278.2	389.2	345.1	294.5	259.7	259.7	259.7	259.7	259.7	259.7	259.7	259.7	259.7	259.7	259.7	259.7	259.7	259.7
Women/Youth startups	-	61.0	123.9	182.0	185.8	193.5	193.5	193.5	193.5	193.5	194.3	194.4	194.3	193.5	193.5	193.5	193.5	193.5	193.5	193.5
Seeds	-	4.1	11.2	18.3	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
Fertilizers	-	-0.1	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Pest control (IPM)	-	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other inputs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Purchased Inp	-	197.3	413.0	589.0	551.2	508.3	473.5	473.5	473.5	473.5	473.5	474.3	474.4	474.2	473.5	473.5	473.5	473.5	473.5	473.5
Labor																				
Labour	-	3.5	8.3	11.5	13.4	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
Sub-total Investment Costs	-	200.8	421.4	600.6	564.6	522.2	487.4	487.4	487.4	487.4	487.4	488.2	488.3	488.2	487.4	487.4	487.4	487.4	487.4	487.4
Operating																				
Purchased Inputs																				
Seeds	-	2.7	4.9	5.1	2.1	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fertilizers	-	-0.0	0.0	0.1	0.1	-0.1	0.1	0.1	0.1	0.1	-0.1	0.1	0.1	0.1	0.1	-0.1	0.1	0.1	0.1	0.1
Pest control (IPM)	-	0.3	0.6	1.0	1.0	0.7	1.0	1.1	1.1	1.0	0.7	1.0	1.1	1.1	1.0	0.7	1.0	1.1	1.1	1.0
Sub-Total Purchased Inp	-	3.0	5.6	6.2	3.2	0.7	1.1	1.2	1.2	1.1	0.6	1.1	1.2	1.2	1.1	0.6	1.1	1.2	1.2	1.1
Labor																				
Labour	-	6.0	15.5	24.5	27.0	23.3	27.3	27.7	27.7	27.0	23.3	27.3	27.7	27.7	27.0	23.3	27.3	27.7	27.7	27.0
Sub-total Operating Costs	-	9.0	21.0	30.7	30.2	24.0	28.4	28.9	28.9	28.1	23.8	28.4	28.9	28.9	28.1	23.8	28.4	28.9	28.9	28.1
Sub-Total Production Cost	-	209.7	442.4	631.2	594.8	546.2	515.8	516.3	516.3	515.5	511.3	516.6	517.2	517.1	515.5	511.3	515.8	516.3	516.3	515.5
Other Costs																				
Project Costs	154.0	199.6	140.9	86.6	53.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OUTFLOWS	154.0	409.3	583.4	717.8	648.4	546.2	515.8	516.3	516.3	515.5	511.3	516.6	517.2	517.1	515.5	511.3	515.8	516.3	516.3	515.5
Cash Flow Before Financing	-154.0	-263.6	-135.3	113.4	451.5	689.9	742.5	754.8	758.3	759.1	763.4	758.0	757.4	757.6	759.1	763.4	758.8	758.3	758.3	759.1

IRR = 54.6%, NPV = 6,012.38

Appendix-1.8: Prices used in the EFA, (as prevailed in June 2020) a/

CHINA H2RDP PDR PRICES PARAMETERS			
	Quantity	Financial Prices (CNY)	Economic Calculations Rule
Outputs			
BP Enterprises			
Fruits business	each	value based	CF: 0.8
Herbal products business	each	value based	CF: 0.8
Vegetables business	each	value based	CF: 0.8
Livestock business	each	value based	CF: 0.8
Tea oil business	each	value based	CF: 0.8
Fishery products business	each	value based	CF: 0.8
Tea business	each	value based	CF: 0.8
Rice trading	each	value based	CF: 0.8
Women, youth startups			
Fruits & vegetables trading	each	value based	CF: 0.8
Community retail shop	each	value based	CF: 0.8
Eco tourism	each	value based	CF: 0.8
Annual crops			
Corn	kg	5	CF: 0.9
Soy bean	kg	6	CF: 0.9
Pepper	kg	6	CF: 0.9
Potato	kg	2	CF: 0.9
Sweet potato	kg	4	CF: 0.9
Rice	kg	5	CF: 0.9
Straw	kg	0.3	CF: 0.9
Cash crops			
Tea /a	kg	20	CF: 0.9
Tender tea	kg	80	CF: 0.9
Chinese Vegetables	kg	1	CF: 0.9
Chinese Lily	kg	20	CF: 0.9
Greenhouse Vegetables	kg	4	CF: 0.9
Grapes	kg	12	CF: 0.9
Walnut (Hickory Nuts)	kg	16	CF: 0.9
Medicinal herbs	kg	35	CF: 0.9
Orange	kg	8	CF: 0.9
Red berry	kg	20	CF: 0.9
Honey suckle	kg	80	CF: 0.9
Citrus	kg	3.75	CF: 0.9
Kiwi	kg	6	CF: 0.9
Red Bay Berry	kg	7	CF: 0.9
Oil Camellia /b	kg	20	CF: 0.9
Plum	kg	10	CF: 0.9
Rural Infrastructure			
Rural roads /d	km	71600	CF: 0.5
Water supply system /e	pumping head	4820000	CF: 0.5
Proxy labour			
Proxy labour value under WOF	pers-day	150	CF: 0.8
Inputs			
BP enterprises			
Project support	each BP	value based	CF: 0.8
Raw material purchases	each BP	value based	CF: 0.8
Agri raw materials	each BP	value based	CF: 0.8
Salary and wages	each BP	value based	CF: 0.8
Utilities, storage, transport	each BP	value based	CF: 0.8
Other operating costs	each BP	value based	CF: 0.8
Turnover tax	each BP	value based	CF: 0.8
Interest on bank loan	each BP	value based	CF: 0.8
Women/Youth startups			
Purchase of van	each	value based	CF: 0.8
Refurbishing 10 rural homes	each	value based	CF: 0.8
Salary	each	value based	CF: 0.8
helpers salary	each	value based	CF: 0.8
Drivers salary	each	value based	CF: 0.8
Transport	each	value based	CF: 0.8
Utilities	each	value based	CF: 0.8
Purchases	each	value based	CF: 0.8
Operating costs	each	value based	CF: 0.8
Project support	each	value based	CF: 0.8

a/ Collected and compiled by PPMO, Changsha

CHINA H2RDP PDR PRICES PARAMETERS			
	Quantity	Financial Prices (CNY)	Economic Calculations Rule
Seeds			
Rice seeds	kg	6	CF: 1.0
Soy bean seed	kg	8	CF: 1.0
Corn seed	kg	28	CF: 1.0
Chinese Vegetables seeds	kg	120	CF: 1.0
Sweet Potato seeds	kg	5	CF: 1.0
Cotton Seeds	kg	12	CF: 1.0
Chinese Lily seedlings	kg	16	CF: 1.0
Medical herbs seedlings	each seedling	16	CF: 1.0
Citrus seedlings	each seedling	4.5	CF: 1.0
Kiwi seedlings	each seedling	13	CF: 1.0
Plum (Red Bay Berry) seedling	each seedling	15	CF: 1.0
Grapes seedlings	each seedling	8	CF: 1.0
Bamboo seedlings	each seedling	5	CF: 1.0
Tea seedlings	each seedling	1	CF: 1.0
Oil Camellia seedling	each seedling	5	CF: 1.0
Green Manure Seeds	mu	70	CF: 1.0
Walnut Seedling	each seedling	10	CF: 1.0
Potato planting material	kg	4	CF: 1.0
Fragrant Solomonseal Rhizome	kg	8	CF: 1.0
Greenhouse seed inputs	kg	120	CF: 1.0
Poplar Seedlings	each seedling	5	CF: 1.0
Tuckahoe Microbial Strain	kg	5	CF: 1.0
Tuckahoe Cultural Medium	kg	0.4	CF: 1.0
Pepper seed	kg	250	CF: 1.0
Honey suckle planting materials	each seedling	8	CF: 1.0
Fertilizers			
Nitrogen	kg	1	CF: 1.0
Potassium	kg	2	CF: 1.0
Phosphorous	kg	2	CF: 1.0
Urea	kg	0.25	CF: 1.0
Calcium	kg	0.25	CF: 1.0
Compound Fertilizers	kg	3	CF: 1.0
Compound Fertilizer for FSR	kg	3	CF: 1.0
Organic Manure	kg	2	CF: 1.0
Chicken Manure	kg	1	CF: 1.0
Manure	kg	0.5	CF: 1.0
Compost	kg	0.8	CF: 1.0
Pest control (IPM)			
Sparying machine rent	mu	22	CF: 0.9
Biological Insecticides	litre	60	CF: 0.9
Bio-pesticides	litre	60	CF: 0.9
Insecticides	litre	60	CF: 0.9
Pesticides	litre	60	CF: 0.9
Pest Others	litre	200	CF: 0.9
Other inputs			
Pest control agent	mu	value based	CF: 0.9
Irrigation	mu	value based	CF: 0.9
Irrigation charges	mu	15	CF: 0.9
Hired Labor	pers-day	150	CF: 0.9
PP chemicals	litre	250	CF: 0.9
Greenhouse Materials	kg	250	CF: 0.9
Irrigation facilities maintenance	mu	value based	CF: 0.9
Labor			
Person day	pers-day	150	CF: 0.8
Land preparation	pers-day	150	CF: 0.8
Harvesting	pers-day	150	CF: 0.8
Planting	pers-day	150	CF: 0.8

Appendix-1.9: PARTICIPATING ENTITIES BY IMPLEMENTATION YEAR

CHINA							
H2RDP PDR							
Project Summary							
FARM DISTRIBUTIONS							
(In Units)							
		1	2	3	4	5	6
Number of Farms	Unit						
Participating							
BP enterprises	BPs		66	135	191	191	191
Startups retailing units	Startup	-	83	177	254	254	254
Irrigation	# of households	-	13,427	30,914	41,312	45,093	47,456
Land development	# of households	-	6,518	17,600	28,682	32,592	32,592
Rural roads	km	-	144	341	472	552	573
Domestic water supply	pumping stations	-	6	15	20	22	23
Cropped Area							
Participating							
Irrigation	mu	-	32,225	74,194	99,149	108,223	113,894
Land development	mu	-	3,585	9,680	15,775	17,926	17,926
Farm Area							
Participating							
BP enterprises	BPs	-	66	135	191	191	191
Startups retailing units	Startup	-	83	177	254	254	254
Irrigation	households	-	16,112	37,097	49,574	54,112	56,947
Land development	households	-	3,520	9,504	15,488	17,600	17,600
Rural roads	km	-	144	341	472	552	573
Domestic water supply	pumping stations	-	6	15	20	22	23

Appendix-1.10: ESTIMATION OF FINANCIAL BENEFITS ANALYSIS (in the perspective of Provincial Government)

TABLE: FINANCIAL ANALYSIS WITH THE PERSPECTIVE OF COUNTIES FOR THE H2RDP PROJECT

H2RDP Project	Project Year (amount in 000 CNY)																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Investments & interest charges																				
County investments of IFAD resources	1,23,927	1,47,864	1,11,841	24,742	14,225	0														
Interest charges payable on Loan 1/	0	3,842	4,584	3,467	767	441														
Total interest payable 2/		3,842	8,426	11,893	12,660	14,833	14,242	13,651	13,060	12,469	11,878	11,287	10,696	10,105	9,514	8,923	8,332	7,741	7,150	6,559
Annual installment 3/	0	0	0	0	0	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908
A Total amount payable to GOC	0	3,842	8,426	11,893	12,660	31,741	31,150	30,559	29,968	29,377	28,786	28,195	27,604	27,013	26,422	25,831	25,240	24,649	24,058	23,467
Tax Revenue:																				
Incremental Taxes payable by BPs 4/	0	0	7,300	14,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400
Taxes payable by the startups 5/	0	0	0	730	2,380	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685
Corporate taxes by Banks 6/	0	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005
B Total tax revenue	0	4,005	11,305	19,135	26,785	27,090														
C. Payment balance																				
Surplus (+)	0	163	2,879	7,242	14,125	-4,651	-4,060	-3,469	-2,878	-2,287	-1,696	-1,105	-514	77	668	1,259	1,850	2,441	3,032	3,623
Deficit (-)																				

1/ Assuming that loan amounts from IFAD resources are transferred to counties at the interest charge of 3.51%

2/ Interest charges estimated on loan amounts "withdrawn from the loan account" and interest charges calculated on the basis of diminishing balance

3/ After a grace period of 5 year, the principal loan amount is payable at CNY 16,908 per year by all 10 counties

4/ Under without project situation the collectives or the cooperatives (BPs) pay taxes estimated at 5% on their turnover and only the incremental taxes are taken into account

5/ Startup are new and it is assumed that these will also be taxed at 5% on their annual profit

6/ Under without project, the collective borrow funds from banks and their annual total interest payable to Banks is CNY 80.1 million and assuming these would continue to borrow funds from banks and these "interest incomes of banks" are taxable and it is assumed at 5%.

Tax Revenue:

BPs (million)	230.0	230.0	237.3	244.4	250.4	250.4
Startups (million)	0	0	0	0.73	2.38	2.685
Bank loan interest (million)	80.1	80.1	80.1	80.1	80.1	80.1

.... Contd

TABLE: FINANCIAL ANALYSIS WITH THE PERSPECTIVE OF COUNTIES FOR THE H2RDP PROJECT

H2RDP Project	21	22	23	24	25	26	27	28	29	30	Total	
Investments & interest charges												
County investments of IFAD resources												4,22,598
Interest charges payable on Loan 1/												13,101
Total interest payable 2/	5,968	5,377	4,786	4,195	3,604	3,013	2,422	1,831	1,240	649		2,30,344
Annual installment 3/	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,908	16,408		4,22,200
A Total amount payable to GOC	22,876	22,285	21,694	21,103	20,512	19,921	19,330	18,739	18,148	17,057		6,52,544
Tax Revenue:												
Incremental Taxes payable by BPs 4/	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400	20,400		5,52,100
Taxes payable by the startups 5/	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685	2,685		70,235
Corporate taxes by Banks 6/	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005	4,005		1,16,145
B Total tax revenue	27,090		7,38,480									
C. Payment balance												
Surplus (+)	4,214	4,805	5,396	5,987	6,578	7,169	7,760	8,351	8,942	10,033		85,936
Deficit (-)												

1/ Assuming that loan amounts from IFAD resources are transferred to counties at the interest charge of 3.51%

2/ Interest charges estimated on loan amounts "withdrawn from the loan account" and interest charges calculated on the basis of diminishing balance

3/ After a grace period of 5 year, the principal loan amount is payable at CNY 16,908 per year by all 10 counties

4/ Under without project situation the collectives or the cooperatives (BPs) pay taxes estimated at 5% on their turnover and only the incremental taxes are taken into account

5/ Startup are new and it is assumed that these will also be taxed at 5% on their annual profit

6/ Under without project, the collective borrow funds from banks and their annual total interest payable to Banks is CNY 80.1 million and assuming these would continue to borrow funds from banks and these "interest incomes of banks" are taxable and it is assumed at 5%.

Tax Revenue:

BPs (million)

Startups (million)

Bank loan interest (million)

APPENDIX-2: SUBPROJECT MODELS

Appendix-2.1 BP business entities (12,522 households); economic budget

Enterprises & women & youth start																			
ECONOMIC BUDGET (DETAILED)																			
(In CNY '000)																			
	Increments																		
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Production																			
Fruits business	-	21,161.3	43,284.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4	61,239.4
Herbal products business	-	11,941.1	24,424.9	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7	34,556.7
Vegetables business	-	19,072.4	39,011.6	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2	55,194.2
Livestock business	-	9,628.7	19,695.2	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0	27,865.0
Tea oil business	-	-	39,364.1	80,517.4	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2	113,917.2
Fishery products business	-	3,022.8	6,183.0	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8	8,747.8
Tea business	-	-	41,730.2	85,357.1	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5	120,764.5
Rice trading	-	396.0	810.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0	1,146.0
Fruits & vegetables trading	27,390.0	63,888.0	106,458.0	123,948.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0	134,112.0
Community retail shop	8,366.4	26,739.2	44,577.6	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0	52,832.0
Eco tourism	996.0	2,788.0	4,796.0	5,788.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0	6,096.0
Proxy labour value under WOP	-996.0	-2,124.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0	-3,048.0
Sub-total Main Production	35,756.4	156,513.4	367,286.8	534,143.6	613,422.8														
Production Cost																			
Project support	38,880.9	80,934.0	107,897.8	68,463.4	27,822.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raw material purchases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Agri raw materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Salary and wages	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utilities, storage, transport	0.3	0.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Other operating costs	66,952.1	136,947.4	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2	193,755.2
Turnover tax	-	4,675.9	9,729.4	13,869.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4	14,009.4
Interest on bank loan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Purchase of van	664.0	752.0	616.0	-	-	-	-	-	-	-	664.0	752.0	616.0	-	-	-	-	-	-
Refurbishing 10 rural homes	3,320.0	3,760.0	3,080.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Salary	5,378.4	14,457.6	22,831.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2	25,603.2
helpers salary	239.0	509.8	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5	731.5
Drivers salary	119.5	254.9	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8	365.8
Transport	49.8	122.8	204.4	238.6	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0	254.0
Utilities	796.8	2,496.0	4,137.6	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8	4,876.8
Purchases	29,348.8	65,907.2	103,534.4	114,134.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4	120,294.4
Operating costs	876.5	1,869.1	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2	2,682.2
Project support	7,968.0	9,024.0	7,392.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Production Cost	154,594.1	321,711.4	456,958.5	424,721.4	390,396.0	362,573.4	362,573.4	362,573.4	362,573.4	362,573.4	363,237.4	363,325.4	363,189.4	362,573.4	362,573.4	362,573.4	362,573.4	362,573.4	362,573.4
OUTFLOWS	154,594.1	321,711.4	456,958.5	424,721.4	390,396.0	362,573.4	362,573.4	362,573.4	362,573.4	362,573.4	363,237.4	363,325.4	363,189.4	362,573.4	362,573.4	362,573.4	362,573.4	362,573.4	362,573.4
Cash Flow	-118,837.7	-165,198.0	-89,671.6	109,422.2	223,026.7	250,849.3	250,849.3	250,849.3	250,849.3	250,849.3	250,185.3	250,097.3	250,233.3	250,849.3	250,849.3	250,849.3	250,849.3	250,849.3	250,849.3

IRR = 37.8%, NPV = 1,779,718.04

Appendix-2.2: BP business entities subproject (12,522 households), Financial budget

CHINA																			
H2RDP PDR																			
Enterprises & \women & youth startups																			
FINANCIAL BUDGET (AGGREGATED)																			
(In CNY '000)																			
	Increments																		
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Production																			
BP Enterprises	-	81,527.7	268,129.0	443,279.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5	529,288.5
Women, youth startups	45,940.5	116,769.0	194,789.5	228,210.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0	241,300.0
Proxy labour	-1,245.0	-2,655.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0	-3,810.0
Sub-total Main Production	44,695.5	195,641.7	459,108.5	667,679.5	766,778.5														
Production Cost																			
BP enterprises	132,291.6	278,197.5	389,229.2	345,111.1	294,485.1	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9	259,706.9
Women/Youth startups	60,951.1	123,941.7	181,968.9	185,790.7	193,509.9	193,509.9	193,509.9	193,509.9	193,509.9	193,509.9	194,339.9	194,449.9	194,279.9	193,509.9	193,509.9	193,509.9	193,509.9	193,509.9	193,509.9
Sub-Total Production Cost	193,242.6	402,139.2	571,198.1	530,901.7	487,995.0	453,216.8	453,216.8	453,216.8	453,216.8	453,216.8	454,046.8	454,156.8	453,986.8	453,216.8	453,216.8	453,216.8	453,216.8	453,216.8	453,216.8
OUTFLOWS	193,242.6	402,139.2	571,198.1	530,901.7	487,995.0	453,216.8	453,216.8	453,216.8	453,216.8	453,216.8	454,046.8	454,156.8	453,986.8	453,216.8	453,216.8	453,216.8	453,216.8	453,216.8	453,216.8
Cash Flow Before Financing	-148,547.1	-206,497.5	-112,089.5	136,777.7	278,783.4	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7	312,731.7	312,621.7	312,791.7	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7
Cash Flow After Financing	-148,547.1	-206,497.5	-112,089.5	136,777.7	278,783.4	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7	312,731.7	312,621.7	312,791.7	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7
Farm Family Benefits After Financing	-148,547.1	-206,497.5	-112,089.5	136,777.7	278,783.4	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7	312,731.7	312,621.7	312,791.7	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7	313,561.7

IRR = 37.8%, NPV = 2,224,647.55

Appendix-2.3: Irrigation and land development subproject, Economic budget (51846 households)

CHINA																			
H2RDP PDR																			
Irrigation & land development Subproj																			
ECONOMIC BUDGET (AGGREGAT)																			
(In CNY '000)																			
	Increments																		
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Production																			
Annual crops	22,186.3	50,462.7	66,204.7	71,957.5	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7	76,135.7
Cash crops	34,764.6	93,270.8	157,315.1	192,684.1	216,182.4	236,140.5	247,650.6	250,817.7	250,817.7	250,817.7	250,817.7	250,817.7	250,817.7	250,817.7	250,817.7	250,817.7	250,817.7	250,817.7	250,817.7
Proxy labour	-1,173.2	-3,168.0	-5,162.8	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6	-5,866.6
Sub-total Main Production	55,777.6	140,565.5	218,357.1	258,775.1	286,451.5	306,409.6	317,919.7	321,086.8											
Production Cost																			
Investment																			
Seeds	4,143.4	11,197.8	18,264.9	20,758.2	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9
Fertilizers	-146.3	-356.3	-514.8	-571.6	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7
Pest control (IPM)	17.6	47.5	77.4	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0	88.0
Other inputs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total Investment Costs	4,014.7	10,889.0	17,827.5	20,274.6	20,253.2														
Operating																			
Purchased Inputs																			
Seeds	2,737.6	4,928.2	5,119.9	2,107.6	164.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fertilizers	-13.3	2.6	87.5	85.0	-130.6	66.7	86.5	86.5	55.5	-130.6	66.7	86.5	86.5	55.5	-130.6	66.7	86.5	86.5	55.5
Pest control (IPM)	228.8	565.0	864.2	911.7	616.0	932.8	969.7	969.7	911.7	616.0	932.8	969.7	969.7	911.7	616.0	932.8	969.7	969.7	911.7
Sub-Total Purchased Inputs	2,953.0	5,495.8	6,071.5	3,104.3	649.6	999.5	1,056.2	1,056.2	967.1	485.4	999.5	1,056.2	1,056.2	967.1	485.4	999.5	1,056.2	1,056.2	967.1
Labor																			
Labour	4,782.9	12,386.9	19,621.3	21,592.8	18,636.1	21,804.0	22,173.7	22,173.7	21,592.8	18,636.1	21,804.0	22,173.7	22,173.7	21,592.8	18,636.1	21,804.0	22,173.7	22,173.7	21,592.8
Sub-total Operating Costs	7,735.9	17,882.7	25,692.8	24,697.1	19,285.7	22,803.5	23,229.9	23,229.9	22,559.9	19,121.5	22,803.5	23,229.9	23,229.9	22,559.9	19,121.5	22,803.5	23,229.9	23,229.9	22,559.9
Sub-Total Production Cost	11,750.7	28,771.7	43,520.3	44,971.6	39,538.9	43,056.7	43,483.1	43,483.1	42,813.1	39,374.7	43,056.7	43,483.1	43,483.1	42,813.1	39,374.7	43,056.7	43,483.1	43,483.1	42,813.1
OUTFLOWS																			
Cash Flow	44,026.9	111,793.8	174,836.8	213,803.5	246,912.6	263,352.9	274,436.6	277,603.7	278,273.7	281,712.1	278,030.1	277,603.7	277,603.7	278,273.7	281,712.1	278,030.1	277,603.7	277,603.7	278,273.7

IRR = None, NPV = 2,676,061.75

Appendix-2.4: Irrigation and land development subproject, Financial budget (51846 households)

CHINA																			
H2RDP PDR																			
Irrigation & land development Subproject Mod																			
FINANCIAL BUDGET (AGGREGATED)																			
(In CNY '000)																			
	Increments																		
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Production																			
Annual crops	24,651.4	56,069.6	73,560.8	79,952.8	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2	84,595.2
Cash crops	38,627.3	103,634.3	174,794.5	214,093.5	240,202.7	262,378.3	275,167.3	278,686.3	278,686.3	278,686.3	278,686.3	278,686.3	278,686.3	278,686.3	278,686.3	278,686.3	278,686.3	278,686.3	278,686.3
Proxy labour	-1,466.6	-3,960.0	-6,453.5	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2	-7,333.2
Sub-total Main Production	61,812.2	155,743.9	241,901.9	286,713.1	317,464.6	339,640.3	352,429.3	355,948.3											
Production Cost																			
Investment																			
Seeds	4,143.4	11,197.8	18,264.9	20,758.2	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9	20,753.9
Fertilizers	-146.3	-356.3	-514.8	-571.6	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7	-588.7
Pest control (IPM)	19.6	52.8	86.0	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
Other inputs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total Investment Costs	4,016.7	10,894.3	17,836.1	20,284.3	20,262.9														
Operating																			
Purchased Inputs																			
Seeds	2,737.6	4,928.2	5,119.9	2,107.6	164.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fertilizers	-13.3	2.6	87.5	85.0	-130.6	66.7	86.5	86.5	55.5	-130.6	66.7	86.5	86.5	55.5	-130.6	66.7	86.5	86.5	55.5
Pest control (IPM)	254.2	627.7	960.2	1,013.0	684.4	1,036.4	1,077.5	1,077.5	1,013.0	684.4	1,036.4	1,077.5	1,077.5	1,013.0	684.4	1,036.4	1,077.5	1,077.5	1,013.0
Sub-Total Purchased Inputs	2,978.4	5,558.6	6,167.5	3,205.6	718.1	1,103.2	1,164.0	1,164.0	1,068.4	553.9	1,103.2	1,164.0	1,164.0	1,068.4	553.9	1,103.2	1,164.0	1,164.0	1,068.4
Labor																			
Labour	5,978.6	15,483.7	24,526.6	26,991.0	23,295.1	27,255.0	27,717.1	27,717.1	26,991.0	23,295.1	27,255.0	27,717.1	27,717.1	26,991.0	23,295.1	27,255.0	27,717.1	27,717.1	26,991.0
Sub-total Operating Costs	8,957.1	21,042.2	30,694.1	30,196.6	24,013.2	28,358.2	28,881.1	28,881.1	28,059.4	23,849.0	28,358.2	28,881.1	28,881.1	28,059.4	23,849.0	28,358.2	28,881.1	28,881.1	28,059.4
Sub-Total Production Cost	12,973.8	31,936.5	48,530.2	50,480.9	44,276.2	48,621.1	49,144.0	49,144.0	48,322.3	44,111.9	48,621.1	49,144.0	49,144.0	48,322.3	44,111.9	48,621.1	49,144.0	49,144.0	48,322.3
OUTFLOWS	12,973.8	31,936.5	48,530.2	50,480.9	44,276.2	48,621.1	49,144.0	49,144.0	48,322.3	44,111.9	48,621.1	49,144.0	49,144.0	48,322.3	44,111.9	48,621.1	49,144.0	49,144.0	48,322.3
Cash Flow Before Financing	48,838.4	123,807.4	193,371.7	236,232.2	273,188.5	291,019.2	303,285.3	306,804.3	307,626.0	311,836.3	307,327.2	306,804.3	306,804.3	307,626.0	311,836.3	307,327.2	306,804.3	306,804.3	307,626.0

IRR = None, NPV = 2,906,628.20

Appendix-2.5: Rural infrastructure notional benefits subproject, Economic budget (81,270 households)

CHINA																			
H2RDP PDR																			
Rural Infrastructure\notional benefits S																			
ECONOMIC BUDGET (DETAILED)																			
(In CNY '000)																			
	Increments																		
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Production																			
Rural roads	5,155.2	12,207.8	16,897.6	19,761.6	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4	20,513.4
Water supply system	14,460.0	36,150.0	48,200.0	53,020.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0	55,430.0
Sub-total Main Production	19,615.2	48,357.8	65,097.6	72,781.6	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4	75,943.4
Production Cost																			
Person day	2,808.0	6,678.0	9,216.0	10,728.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0
OUTFLOWS	2,808.0	6,678.0	9,216.0	10,728.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0	11,142.0
Cash Flow	16,807.2	41,679.8	55,881.6	62,053.6	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4	64,801.4

IRR = None, NPV = 672,856.28

Appendix-2.6: Rural infrastructure subproject, Financial budget (81,270 households)

CHINA																			
H2RDP PDR																			
Rural Infrastructure\notional benefits Su																			
FINANCIAL BUDGET (DETAILED)																			
(In CNY '000)																			
	Increments																		
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Main Production																			
Rural roads	10,310.4	24,415.6	33,795.2	39,523.2	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8	41,026.8
Water supply system	28,920.0	72,300.0	96,400.0	106,040.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0	110,860.0
Sub-total Main Production	39,230.4	96,715.6	130,195.2	145,563.2	151,886.8														
Production Cost																			
Person day	3,510.0	8,347.5	11,520.0	13,410.0	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5	13,927.5
OUTFLOWS	3,510.0	8,347.5	11,520.0	13,410.0	13,927.5														
Cash Flow Before Financing	35,720.4	88,368.1	118,675.2	132,153.2	137,959.3														
IRR = None, NPV = 1,443,740.80																			

APPENDIX-3: HOUSEHOLD AND AREA MODELS

Appendix-3.1 BP Entity enterprises (45 beneficiaries per unit)

CHINA H2RDP PDR BP enterprises activity FINANCIAL BUDGET (DETAILED) (In CNY '000) /a											
	Increments										
	1	2	3	4	5	6	7	8	9	10	11 to 20
Main Production											
Fruits business	-	400.8	400.8	400.8	400.8	400.8	400.8	400.8	400.8	400.8	400.8
Herbal products business	-	226.2	226.2	226.2	226.2	226.2	226.2	226.2	226.2	226.2	226.2
Vegetables business	-	361.2	361.2	361.2	361.2	361.2	361.2	361.2	361.2	361.2	361.2
Livestock business	-	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4	182.4
Tea oil business	-	-	745.5	745.5	745.5	745.5	745.5	745.5	745.5	745.5	745.5
Fishery products business	-	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
Tea business	-	-	790.3	790.3	790.3	790.3	790.3	790.3	790.3	790.3	790.3
Rice trading	-	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Sub-total Main Production	-	1,235.3	2,771.1	2,771.1	2,771.1	2,771.1	2,771.1	2,771.1	2,771.1	2,771.1	2,771.1
Production Cost											
Project support	736.4	763.0	621.0	-	-	-	-	-	-	-	-
Raw material purchases	-	-	-	-	-	-	-	-	-	-	-
Agri raw materials	-	-	-	-	-	-	-	-	-	-	-
Salary and wages	-	-	-	-	-	-	-	-	-	-	-
Utilities, storage, transport	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other operating costs	1,268.0	1,268.0	1,268.0	1,268.0	1,268.0	1,268.0	1,268.0	1,268.0	1,268.0	1,268.0	1,268.0
Turnover tax	-	88.6	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7	91.7
Interest on bank loan	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Production Cost	2,004.4	2,119.6	1,980.8	1,359.7	1,359.7	1,359.7	1,359.7	1,359.7	1,359.7	1,359.7	1,359.7
OUTFLOWS	2,004.4	2,119.6	1,980.8	1,359.7	1,359.7	1,359.7	1,359.7	1,359.7	1,359.7	1,359.7	1,359.7
Cash Flow Before Financing	-2,004.4	-884.3	790.4	1,411.4	1,411.4	1,411.4	1,411.4	1,411.4	1,411.4	1,411.4	1,411.4
IRR = 34.7%, NPV = 5,220.49 /a 45 households per BP											

Appendix-3.2 Women and Youth business startup (6 beneficiaries per unit)

CHINA											
H2RDP PDR											
Startups retailing units activity											
FINANCIAL BUDGET (DETAILED)											
(In CNY '000) /a											
	1	2	3	4	5	6	7	8	9	10	11 to 20
Main Production											
Fruits & vegetables trading	412.5	495.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0	660.0
Community retail shop	126.0	260.0	260.0	260.0	260.0	260.0	260.0	260.0	260.0	260.0	260.0
Eco tourism	15.0	25.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Proxy labour value undeer WOP	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0
Sub-total Main Production	538.5	765.0	935.0								
Production Cost											
Purchase of van	10.0	-	-	-	-	-	-	-	-	-	10.0
Refurbishing 10 rural homes	50.0	-	-	-	-	-	-	-	-	-	-
Salary	81.0	126.0	126.0	126.0	126.0	126.0	126.0	126.0	126.0	126.0	126.0
helpers salary	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Drivers salary	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Transport	0.8	1.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Utilities	12.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Purchases	442.0	492.0	592.0	592.0	592.0	592.0	592.0	592.0	592.0	592.0	592.0
Operating costs	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2
Project support	120.0	-	-	-	-	-	-	-	-	-	-
Sub-Total Production Cost	734.4	661.6	761.9	771.9							
OUTFLOWS	734.4	661.6	761.9	771.9							
Cash Flow Before Financing	-195.9	103.4	173.2	163.2							

IRR = 73.3%, NPV = 905.39

\a 6 persons (youth or women) per group

Appendix-3.3 Irrigated crops (1.2 mu/household)

CHINA
H2RDP PDR
Irrigation crop

FINANCIAL BUDGET (DETAILED)

(In CNY)

	WOP	WP	Increments										
	20	20	1	2	3	4	5	6	7	8	9	10	11 to 20
Main Production													
Corn	400	450	50	50	50	50	50	50	50	50	50	50	50
Pepper	3,750	4,725	975	975	975	975	975	975	975	975	975	975	975
Rice	3,000	3,900	900	900	900	900	900	900	900	900	900	900	900
Straw	209	248	40	40	40	40	40	40	40	40	40	40	40
Chinese Vegetables	625	750	125	125	125	125	125	125	125	125	125	125	125
Sub-total Main Production	7,984	10,073	2,090										
Production Cost													
Investment													
Rice seeds	7	5	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Corn seed	11	11	-	-	-	-	-	-	-	-	-	-	-
Pepper seed	8	8	-	-	-	-	-	-	-	-	-	-	-
Sub-total Investment Costs	685	676	-9										
Operating													
Purchased Inputs													
Chinese Vegetables seeds	120	120	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Purchased Inputs	213	200	-13										
Labor													
Person day	2,913	2,913	-	-	-	-	-	-	-	-	-	-	-
Land preparation	150	150	-	-	-	-	-	-	-	-	-	-	-
Harvesting	750	750	-	-	-	-	-	-	-	-	-	-	-
Planting	1,500	1,500	-	-	-	-	-	-	-	-	-	-	-
Sub-Total Hired Labor	5,313	5,313	-										
Sub-total Operating Costs	5,526	5,513	-13										
Sub-Total Production Cost	6,210	6,189	-22										
OUTFLOWS	6,210	6,189	-22										
Cash Flow Before Financing	1,773	3,885	2,111										

IRR = None, NPV = 15,786.16

Appendix-3.4 Land development (0.53 mu per household)

CHINA											
H2RDP PDR											
Land development crop											
FINANCIAL BUDGET (AGGREGATED)											
(In CNY)											
	Increments										
	1	2	3	4	5	6	7	8	9	10	11 to 20
Main Production											
Annual crops	-265.0	-265.0	-265.0	-265.0	-265.0	-265.0	-265.0	-265.0	-265.0	-265.0	-265.0
Cash crops	5,668.8	5,668.8	6,748.8	7,468.8	8,368.8	8,368.8	8,368.8	8,368.8	8,368.8	8,368.8	8,368.8
Proxy labour	-225.0	-225.0	-225.0	-225.0	-225.0	-225.0	-225.0	-225.0	-225.0	-225.0	-225.0
Sub-total Main Production	5,178.8	5,178.8	6,258.8	6,978.8	7,878.8						
Production Cost											
Investment											
Seeds	639.4	639.4	639.4	639.4	639.4	639.4	639.4	639.4	639.4	639.4	639.4
Fertilizers	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5	-7.5
Pest control (IPM)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Sub-total Investment Costs	634.9										
Operating											
Purchased Inputs											
Seeds	420.0	42.0	-	-	-	-	-	-	-	-	-
Fertilizers	18.5	19.4	19.4	19.4	19.4	18.5	19.4	19.4	19.4	19.4	18.5
Pest control (IPM)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Sub-Total Purchased Inputs	468.5	91.4	49.4	49.4	49.4	48.5	49.4	49.4	49.4	49.4	48.5
Labor											
Labour	816.0	816.0	816.0	816.0	816.0	816.0	816.0	816.0	816.0	816.0	816.0
Sub-total Operating Costs	1,284.5	907.4	865.4	865.4	865.4	864.5	865.4	865.4	865.4	865.4	864.5
Sub-Total Production Cost	1,919.4	1,542.3	1,500.3	1,500.3	1,500.3	1,499.4	1,500.3	1,500.3	1,500.3	1,500.3	1,499.4
OUTFLOWS	1,919.4	1,542.3	1,500.3	1,500.3	1,500.3	1,499.4	1,500.3	1,500.3	1,500.3	1,500.3	1,499.4
Cash Flow Before Financing	3,259.3	3,636.5	4,758.5	5,478.5	6,378.5	6,379.3	6,378.5	6,378.5	6,378.5	6,378.5	6,379.3

IRR = None, NPV = 39,760.60

Appendix-3.5 Rural roads (90 households per km of road)

CHINA H2RDP PDR Rural roads Activity FINANCIAL BUDGET (DETAILED) (In CNY) /a	April - March						
	Without Project	With Project			Increments		
	1 to 20	1	2 to 19	20	1	2 to 19	20
Main Production							
Rural roads	-	71,600.0	71,600.0	71,600.0	71,600.0	71,600.0	71,600.0
Production Cost							
Person day	-	22,500.0	22,500.0	22,500.0	22,500.0	22,500.0	22,500.0
OUTFLOWS	-	22,500.0	22,500.0	22,500.0	22,500.0	22,500.0	22,500.0
Cash Flow Before Financing	-	49,100.0	49,100.0	49,100.0	49,100.0	49,100.0	49,100.0
IRR = None, NPV = 348,992.90							
/a 90 households per km of road							

Appendix-3.6 Domestic water supply (1205 households per pumping station)

CHINA H2RDP PDR Domestic water supply Activity FINANCIAL BUDGET (DETAILED) (In CNY) /a	April - March						
	Without Project	With Project			Increments		
	1 to 20	1	2 to 19	20	1	2 to 19	20
Main Production							
Water supply system	-	4,820,000.0	4,820,000.0	4,820,000.0	4,820,000.0	4,820,000.0	4,820,000.0
Production Cost							
Person day	-	30,000.0	30,000.0	30,000.0	30,000.0	30,000.0	30,000.0
OUTFLOWS	-	30,000.0	30,000.0	30,000.0	30,000.0	30,000.0	30,000.0
Cash Flow Before Financing	-	4,790,000.0	4,790,000.0	4,790,000.0	4,790,000.0	4,790,000.0	4,790,000.0
IRR = None, NPV = 35,754,959.25							
/a 1205 households per system							

APPENDIX-4: PRODUCTION MODELS (BP & Start-up businesses)

Appendix 4.1 BP Financial budget of one Fruits Trading business

CHINA H2RDP PDR Fruits trading Activity Model FINANCIAL BUDGET (In CNY)	April - March								
	Existing Technology	New Technology				Increments			
	1 to 20	1	2	3	4 to 20	1	2	3	4 to 20
Revenue	64,125,000.0	64,125,000.0	67,331,250.0	67,331,250.0	67,331,250.0	-	3,206,250.0	3,206,250.0	3,206,250.0
Input costs									
Project support	-	736,380.0	762,990.0	621,040.0	-	736,380.0	762,990.0	621,040.0	-
Raw material purchases	11,975,000.0	11,975,000.0	11,975,000.0	11,975,000.0	11,975,000.0	-	-	-	-
Agri raw materials	37,860,000.0	37,860,000.0	37,860,000.0	37,860,000.0	37,860,000.0	-	-	-	-
Salary and wages	6,315,000.0	6,315,000.0	6,315,000.0	6,315,000.0	6,315,000.0	-	-	-	-
Utilities, storage, transport	-	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
Other operating costs	-	3,157,500.0	3,157,500.0	3,157,500.0	3,157,500.0	3,157,500.0	3,157,500.0	3,157,500.0	3,157,500.0
Turnover tax	2,835,000.0	2,835,000.0	3,118,000.0	3,118,000.0	3,118,000.0	-	283,000.0	283,000.0	283,000.0
Sub-total Input costs	58,985,000.0	62,878,895.8	63,188,505.8	63,046,555.8	62,425,515.8	3,893,895.8	4,203,505.8	4,061,555.8	3,440,515.8
Income (Before Labor Costs)	5,140,000.0	1,246,104.2	4,142,744.2	4,284,694.2	4,905,734.2	-3,893,895.8	-997,255.8	-855,305.8	-234,265.8

Income Before Labor: IRR = None, NPV = -7,633,363.46

Income After Labor: IRR = None, NPV = -7,633,363.46

Appendix 4.2 BP Financial budget of one Herbal Products business

Herbal Products Activity Model FINANCIAL BUDGET (In CNY)	April - March								
	Existing Technology		New Technology			Increments			
	1 to 20	1	2	3	4 to 20	1	2	3	4 to 20
Revenue	36,185,000.0	36,185,000.0	37,994,250.0	37,994,250.0	37,994,250.0	-	1,809,250.0	1,809,250.0	1,809,250.0
Input costs									
Project support	-	736,380.0	762,990.0	621,040.0	-	736,380.0	762,990.0	621,040.0	-
Raw material purchases	7,250,000.0	7,250,000.0	7,250,000.0	7,250,000.0	7,250,000.0	-	-	-	-
Agri raw materials	23,465,000.0	23,465,000.0	23,465,000.0	23,465,000.0	23,465,000.0	-	-	-	-
Salary and wages	3,760,000.0	3,760,000.0	3,760,000.0	3,760,000.0	3,760,000.0	-	-	-	-
Utilities, storage, transport	-	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
Other operating costs	-	1,880,000.0	1,880,000.0	1,880,000.0	1,880,000.0	1,880,000.0	1,880,000.0	1,880,000.0	1,880,000.0
Turnover tax	1,595,000.0	1,595,000.0	1,754,500.0	1,754,500.0	1,754,500.0	-	159,500.0	159,500.0	159,500.0
Sub-total Input costs	36,070,000.0	38,686,389.4	38,872,499.4	38,730,549.4	38,109,509.4	2,616,389.4	2,802,499.4	2,660,549.4	2,039,509.4
Income (Before Labor Costs)	115,000.0	-2,501,389.4	-878,249.4	-736,299.4	-115,259.4	-2,616,389.4	-993,249.4	-851,299.4	-230,259.4

Income Before Labor: IRR = None, NPV = -6,370,577.96

Income After Labor: IRR = None, NPV = -6,370,577.96

Appendix 4.3 BP Financial budget of one Vegetables trading business

CHINA										
H2RDP PDR										
Vegetable business Activity Model										
April - March										
FINANCIAL BUDGET (In CNY)	Existing Technology		New Technology				Increments			
	1 to 20	1	2	3	4 to 20	1	2	3	4 to 20	
	Revenue	57,795,000.0	57,795,000.0	60,684,750.0	60,684,750.0	60,684,750.0	-	2,889,750.0	2,889,750.0	2,889,750.0
Input costs										
Project support	-	736,380.0	762,990.0	621,040.0	-	736,380.0	762,990.0	621,040.0	-	
Raw material purchases	9,340,000.0	9,340,000.0	9,340,000.0	9,340,000.0	9,340,000.0	-	-	-	-	
Agri raw materials	33,137,500.0	33,137,500.0	33,137,500.0	33,137,500.0	33,137,500.0	-	-	-	-	
Salary and wages	4,322,500.0	4,322,500.0	4,322,500.0	4,322,500.0	4,322,500.0	-	-	-	-	
Utilities, storage, transport	-	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	
Other operating costs	-	2,161,250.0	2,161,250.0	2,161,250.0	2,161,250.0	2,161,250.0	2,161,250.0	2,161,250.0	2,161,250.0	
Turnover tax	1,602,500.0	1,602,500.0	1,682,625.0	1,682,625.0	1,682,625.0	-	80,125.0	80,125.0	80,125.0	
Interest on bank loan	456,250.0	456,250.0	456,250.0	456,250.0	456,250.0	-	-	-	-	
Sub-total Input costs	48,858,750.0	51,756,390.8	51,863,125.8	51,721,175.8	51,100,135.8	2,897,640.8	3,004,375.8	2,862,425.8	2,241,385.8	
Income (Before Labor Costs)	8,936,250.0	6,038,609.2	8,821,624.2	8,963,574.2	9,584,614.2	-2,897,640.8	-114,625.8	27,324.2	648,364.2	

Income Before Labor: IRR = 14.9%, NPV = 3,474,371.30
Income After Labor: IRR = 14.9%, NPV = 3,474,371.30

Appendix 4.4 BP Financial budget of one Livestock business

CHINA									
H2RDP PDR									
Livestock business Activity Model									
April - March									
FINANCIAL BUDGET (In CNY)	Existing Technology		New Technology			Increments			
	1 to 20	1	2	3	4 to 20	1	2	3	4 to 20
	Revenue	29,178,000.0	29,178,000.0	30,636,900.0	30,636,900.0	30,636,900.0	-	1,458,900.0	1,458,900.0
Input costs									
Project support	-	736,380.0	762,990.0	621,040.0	-	736,380.0	762,990.0	621,040.0	-
Raw material purchases	5,336,000.0	5,336,000.0	5,336,000.0	5,336,000.0	5,336,000.0	-	-	-	-
Agri raw materials	18,924,000.0	18,924,000.0	18,924,000.0	18,924,000.0	18,924,000.0	-	-	-	-
Salary and wages	1,016,000.0	1,016,000.0	1,016,000.0	1,016,000.0	1,016,000.0	-	-	-	-
Utilities, storage, transport	-	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Other operating costs	-	508,000.0	508,000.0	508,000.0	508,000.0	508,000.0	508,000.0	508,000.0	508,000.0
Turnover tax	1,416,000.0	1,416,000.0	1,557,600.0	1,557,600.0	1,557,600.0	-	141,600.0	141,600.0	141,600.0
Interest on bank loan	70,000.0	70,000.0	70,000.0	70,000.0	70,000.0	-	-	-	-
Sub-total Input costs	26,762,000.0	28,006,382.5	28,174,592.5	28,032,642.5	27,411,602.5	1,244,382.5	1,412,592.5	1,270,642.5	649,602.5
Income (Before Labor Costs)	2,416,000.0	1,171,617.5	2,462,307.5	2,604,257.5	3,225,297.5	-1,244,382.5	46,307.5	188,257.5	809,297.5

Income Before Labor: IRR = 38.0%, NPV = 6,901,217.84

Income After Labor: IRR = 38.0%, NPV = 6,901,217.84

Appendix 4.5 BP Financial budget of one Tea Oil business

CHINA
H2RDP PDR
Tea oil business Activity Model
FINANCIAL BUDGET
(In CNY)

	April - March								
	Existing Technology	New Technology				Increments			
	1 to 20	1	2	3	4 to 20	1	2	3	4 to 20
Revenue	125,585,000.0	125,585,000.0	125,585,000.0	131,549,250.0	131,549,250.0	-	-	5,964,250.0	5,964,250.0
Input costs									
Project support	-	736,380.0	762,990.0	621,040.0	-	736,380.0	762,990.0	621,040.0	-
Raw material purchases	22,410,000.0	22,410,000.0	22,410,000.0	22,410,000.0	22,410,000.0	-	-	-	-
Agri raw materials	79,170,000.0	79,170,000.0	79,170,000.0	79,170,000.0	79,170,000.0	-	-	-	-
Salary and wages	1,635,000.0	1,635,000.0	1,635,000.0	1,635,000.0	1,635,000.0	-	-	-	-
Utilities, storage, transport	-	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Other operating costs	-	817,500.0	817,500.0	817,500.0	817,500.0	817,500.0	817,500.0	817,500.0	817,500.0
Turnover tax	555,000.0	555,000.0	582,750.0	582,750.0	582,750.0	-	27,750.0	27,750.0	27,750.0
Interest on bank loan	1,542,500.0	1,542,500.0	1,542,500.0	1,542,500.0	1,542,500.0	-	-	-	-
Sub-total Input costs	105,312,500.0	106,866,384.0	106,920,744.0	106,778,794.0	106,157,754.0	1,553,884.0	1,608,244.0	1,466,294.0	845,254.0
Income (Before Labor Costs)	20,272,500.0	18,718,616.0	18,664,256.0	24,770,456.0	25,391,496.0	-1,553,884.0	-1,608,244.0	4,497,956.0	5,118,996.0

Income Before Labor: IRR = 101.4%, NPV = 50,800,598.39

Income After Labor: IRR = 101.4%, NPV = 50,800,598.39

Appendix 4.6 BP Financial budget of one Fishery products business

CHINA H2RDP PDR Fishery business Activity Model FINANCIAL BUDGET (In CNY)	April - March								
	Existing Technology	New Technology				Increments			
	1 to 20	1	2	3	4 to 20	1	2	3	4 to 20
Revenue	9,160,000.0	9,160,000.0	9,618,000.0	9,618,000.0	9,618,000.0	-	458,000.0	458,000.0	458,000.0
Input costs									
Project support	-	736,380.0	762,990.0	621,040.0	-	736,380.0	762,990.0	621,040.0	-
Raw material purchases	1,840,000.0	1,840,000.0	1,840,000.0	1,840,000.0	1,840,000.0	-	-	-	-
Agri raw materials	5,930,000.0	5,930,000.0	5,930,000.0	5,930,000.0	5,930,000.0	-	-	-	-
Salary and wages	950,000.0	950,000.0	950,000.0	950,000.0	950,000.0	-	-	-	-
Utilities, storage, transport	-	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Other operating costs	-	475,000.0	475,000.0	475,000.0	475,000.0	475,000.0	475,000.0	475,000.0	475,000.0
Turnover tax	250,000.0	250,000.0	250,000.0	275,000.0	275,000.0	-	-	25,000.0	25,000.0
Sub-total Input costs	8,970,000.0	10,181,382.5	10,207,992.5	10,091,042.5	9,470,002.5	1,211,382.5	1,237,992.5	1,121,042.5	500,002.5
Income (Before Labor Costs)	190,000.0	-1,021,382.5	-589,992.5	-473,042.5	147,997.5	-1,211,382.5	-779,992.5	-663,042.5	-42,002.5

Income Before Labor: IRR = None, NPV = -2,842,995.62
Income After Labor: IRR = None, NPV = -2,842,995.62

Appendix 4.7 BP Financial budget of one Tea leaves business

CHINA H2RDP PDR Tea business Activity Model FINANCIAL BUDGET (In CNY)	April - March								
	Existing Technology	New Technology				Increments			
	1 to 20	1	2	3	4 to 20	1	2	3	4 to 20
Revenue	126,455,000.0	126,455,000.0	126,455,000.0	132,777,750.0	132,777,750.0	-	-	6,322,750.0	6,322,750.0
Input costs									
Project support	-	736,380.0	762,990.0	621,040.0	-	736,380.0	762,990.0	621,040.0	-
Raw material purchases	23,120,000.0	23,120,000.0	23,120,000.0	23,120,000.0	23,120,000.0	-	-	-	-
Agri raw materials	81,975,000.0	81,975,000.0	81,975,000.0	81,975,000.0	81,975,000.0	-	-	-	-
Salary and wages	2,190,000.0	2,190,000.0	2,190,000.0	2,190,000.0	2,190,000.0	-	-	-	-
Utilities, storage, transport	-	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Other operating costs	-	1,095,000.0	1,095,000.0	1,095,000.0	1,095,000.0	1,095,000.0	1,095,000.0	1,095,000.0	1,095,000.0
Turnover tax	330,000.0	330,000.0	346,500.0	346,500.0	346,500.0	-	16,500.0	16,500.0	16,500.0
Interest on bank loan	910,500.0	910,500.0	910,500.0	910,500.0	910,500.0	-	-	-	-
Sub-total Input costs	108,525,500.0	110,356,885.0	110,399,995.0	110,258,045.0	109,637,005.0	1,831,385.0	1,874,495.0	1,732,545.0	1,111,505.0
Income (Before Labor Costs)	17,929,500.0	16,098,115.0	16,055,005.0	22,519,705.0	23,140,745.0	-1,831,385.0	-1,874,495.0	4,590,205.0	5,211,245.0

Income Before Labor: IRR = 91.4%, NPV = 51,272,911.91
Income After Labor: IRR = 91.4%, NPV = 51,272,911.91

Appendix 4.8 BP Financial budget of one Rice Trading business

CHINA H2RDP PDR Rice business Activity Model FINANCIAL BUDGET (In CNY)	April - March									
	Existing	New Technology				Increments				
	Technology									
	1 to 20	1	2	3	4 to 20	1	2	3	4 to 20	
Revenue	1,200,000.0	1,200,000.0	1,260,000.0	1,260,000.0	1,260,000.0	-	60,000.0	60,000.0	60,000.0	60,000.0
Input costs										
Project support	-	736,380.0	762,990.0	621,040.0	-	736,380.0	762,990.0	621,040.0	-	-
Agri raw materials	800,000.0	800,000.0	800,000.0	800,000.0	800,000.0	-	-	-	-	-
Salary and wages	100,000.0	100,000.0	100,000.0	100,000.0	100,000.0	-	-	-	-	-
Utilities, storage, transport	-	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other operating costs	-	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0
Sub-total Input costs	900,000.0	1,686,380.5	1,712,990.5	1,571,040.5	950,000.5	786,380.5	812,990.5	671,040.5	50,000.5	50,000.5
Income (Before Labor Costs)	300,000.0	-486,380.5	-452,990.5	-311,040.5	309,999.5	-786,380.5	-752,990.5	-611,040.5	9,999.5	9,999.5

Income Before Labor: IRR = -18.7%, NPV = -1,862,373.39
Income After Labor: IRR = -18.7%, NPV = -1,862,373.39

Appendix 4.9 Startup Financial budget of one Fruits and vegetable retailing shop

CHINA H2RDP PDR Fruits and vegetables retailing Activity Model FINANCIAL BUDGET (In CNY) /a		April - March						
		Existing Technology		New Technology			Increments	
		1 to 20	1	2	3 to 20	1	2	3 to 20
Revenue								
Fruits & vegetables trading	-	825,000.0	990,000.0	1,320,000.0	825,000.0	990,000.0	1,320,000.0	
Proxy labour value under WOP	15,000.0	-	-	-	-15,000.0	-15,000.0	-15,000.0	
Sub-total Revenue	15,000.0	825,000.0	990,000.0	1,320,000.0	810,000.0	975,000.0	1,305,000.0	
Input costs								
Project support	-	120,000.0	-	-	120,000.0	-	-	
Salary	-	90,000.0	180,000.0	180,000.0	90,000.0	180,000.0	180,000.0	
Transport	-	1,500.0	2,000.0	2,500.0	1,500.0	2,000.0	2,500.0	
Utilities	-	12,000.0	24,000.0	24,000.0	12,000.0	24,000.0	24,000.0	
Purchases	-	500,000.0	600,000.0	800,000.0	500,000.0	600,000.0	800,000.0	
Operating costs	-	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	12,000.0	
Sub-total Input costs	-	735,500.0	818,000.0	1,018,500.0	735,500.0	818,000.0	1,018,500.0	
Income (Before Labor Costs)	15,000.0	89,500.0	172,000.0	301,500.0	74,500.0	157,000.0	286,500.0	
Income Before Labor: IRR = None, NPV = 3,251,058.18								
Income After Labor: IRR = None, NPV = 3,251,058.18								
\a commodities sold 50t,60t and 80 t per year								

Appendix 4.10 Startup Financial budget of one Community retailing shop

CHINA H2RDP PDR Community retail shop Activity Model FINANCIAL BUDGET (In CNY)	April - March				
	Existing		Increments		
	Technology	Low Technology			
	1 to 20	1	2 to 20	1	2 to 20
Revenue					
Community retail shop	-	315,000.0	650,000.0	315,000.0	650,000.0
Proxy labour value under WOP	15,000.0	-	-	-15,000.0	-15,000.0
Sub-total Revenue	15,000.0	315,000.0	650,000.0	300,000.0	635,000.0
Input costs					
Project support	-	120,000.0	-	120,000.0	-
Salary	-	72,000.0	72,000.0	72,000.0	72,000.0
Utilities	-	12,000.0	24,000.0	12,000.0	24,000.0
Purchases	-	480,000.0	480,000.0	480,000.0	480,000.0
Operating costs	-	12,000.0	12,000.0	12,000.0	12,000.0
Sub-total Input costs	-	696,000.0	588,000.0	696,000.0	588,000.0
Income (Before Labor Costs)	15,000.0	-381,000.0	62,000.0	-396,000.0	47,000.0
Income Before Labor: IRR = 9.9%, NPV = 163,819.12					
Income After Labor: IRR = 9.9%, NPV = 163,819.12					

Appendix 4.10 Startup Financial budget of one Eco-tourism business

CHINA H2RDP PDR Eco-tourism Activity Model FINANCIAL BUDGET (In CNY) /a	April - March					
	Existing Technology		New Technology			
	1 to 20	1	2	3 to 10	11	12 to 20
Revenue						
Eco tourism	-	150,000.0	250,000.0	300,000.0	300,000.0	300,000.0
Proxy labour value undeer WOP	15,000.0	-	-	-	-	-
Sub-total Revenue	15,000.0	150,000.0	250,000.0	300,000.0	300,000.0	300,000.0
Input costs						
Project support	-	120,000.0	-	-	-	-
Refurbishing 10 rural homes	-	500,000.0	-	-	-	-
Purchase of van	-	100,000.0	-	-	100,000.0	-
Salary	-	72,000.0	72,000.0	72,000.0	72,000.0	72,000.0
helpers salary	-	36,000.0	36,000.0	36,000.0	36,000.0	36,000.0
Drivers salary	-	18,000.0	18,000.0	18,000.0	18,000.0	18,000.0
Utilities	-	12,000.0	24,000.0	24,000.0	24,000.0	24,000.0
Operating costs	-	24,000.0	24,000.0	24,000.0	24,000.0	24,000.0
Sub-total Input costs	-	882,000.0	174,000.0	174,000.0	274,000.0	174,000.0
Income (Before Labor Costs)	15,000.0	-732,000.0	76,000.0	126,000.0	26,000.0	126,000.0

Income Before Labor: IRR = 11.9%, NPV = 462,343.09
Income After Labor: IRR = 11.9%, NPV = 462,343.09
/a Refurbishing 10 rural home at CNY 50000 each

China

Hunan Rural Revitalization Demonstration Project Project Design Report

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

Mission Dates: 27/04/2020 22/05/2020
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Project No. 2000002359
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Asia and the Pacific Division
Programme Management Department

Hunan Rural Revitalization Demonstration Project (H2RDP)

**SOCIAL, ENVIRONMENTAL AND CLIMATE ASSESSMENT PROCEDURES
(SECAP)**

ANNEX 5. SECAP REVIEW NOTE

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I. SECAP REVIEW NOTE

1. Major landscape characteristics and issues (social, health, environmental and climate change)

A. Country Context:

1. **National context:** The Government of China is likely to eradicate extreme rural poverty, measured against the prevailing national poverty standards (i.e. approximately US\$1.90/day), by 2020 - making China the first developing country to achieve SDG1, ten years ahead of the global target. There is broad consensus that China has achieved a historic reduction in absolute poverty since the initiation of the rural reform process in 1978. Based on the international poverty line of \$1.90 per day (expressed in 2011 purchasing power parity), the World Bank estimates that the incidence of poverty in China declined from 878 million in 1981 to 6 million in 2019 (or from 88% to 0.6% of the population). Official government estimates indicate a similarly sharp and prolonged decline in the number of poor, and that the number of rural poor had declined to about 5.5 million by end of 2019.
2. **China's economic progress:** Since the opening-up of economic reforms in 1978, China has experienced unprecedented economic growth, averaging 9 percent annual GDP growth per year over the past 40 years. This makes China the second largest economy in the world. China's share in the world economy rose from 1.5 percent in 1978 to 15 percent today, and per capita income increased 32-fold, from 300 US dollars in 1978 to 10,100 US dollars in 2019.
3. However, sustaining this achievement, reducing inequalities (between coastal and western provinces, urban and rural areas, and among population. i.e. relative poverty) and avoiding that the people fall back into poverty, will remain priorities for the Government in the years following 2020. In addition to this, the Government has recently developed a Rural Revitalization strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), creation of employment opportunities, and comprehensive infrastructure development - among other strategies.
4. **Covid-19 Economic Impact on China:** According to official figures, China economy shrunk by 6.8% in first quarter of 2020. (during which some 460,000 Chinese firms closed, and 12,000 existing foreign trade enterprises closed down). While IMF predicted Global Economy will shrink by 3% this year

compared to its pre-pandemic prediction of a 3.3% expansion. According to the International Monetary Fund, China alone was expected to account for 39 percent of global economic growth. A 0.5 percentage point reduction in Chinese growth will likely be transmitted and magnified globally. Officially China didn't set any GDP growth target this year after Congress. As premier Li Keqiang announced, the government will for the first time not put a specific economic growth target but instead focus on stabilizing the job market and supply chains, and continuing prioritizing efforts on poverty alleviation.

5. Regarding resilience and re-bounce of China economy, President quoted: “Our country has the world’s most comprehensive and the largest scale of industrial ecosystem, with a strong manufacturing capability ... [We] have over 100 million businesses, over 170 million educated and trained workers and more than 400 million middle-income earners, making up a huge domestic consumption market in a country of 1.4 billion people”. Being the first country to both experience a Covid-19 outbreak and one of the first that has been successful in containment, China has good opportunities to make for the loss during the rest of the year particularly on domestic tourism and exports. Nevertheless, authorities are confident that impact of Covid-19 will not halt the efforts in achieving the eradication of absolute poverty by end of 2020.
6. **Regional inequality in China.** Several studies indicate that disparities between urban and rural areas represent the largest share of total inequality. Unequal access to infrastructure and municipal services, which is associated with rural-urban disparity, is a significant contributor to overall inequality. Disparities between coastal and inland provinces are also high. Substantial state-led investments in the interior provinces have reduced the income gap in recent years but at the cost of capital misallocation, which is increasingly evident. The challenge to create sustainable income opportunities in the interior provinces thus remains.
7. **China socio-economic sustainability foresee another challenge of quick demographic transition and aging population.** The widening urban-rural population gap and ageing population are becoming new challenges for China to meet social security and keep the agriculture labour force intact, which are the backbone of China’s food security depending on 250 million small farm holders. Today, about 40 percent of the Chinese population are registered in rural areas, which is predicted to be down to 31 percent by 2030. Between 1950 and 2015, the total fertility rate per woman declined from 6.11 to 1.6. over the same time, the overall mortality rate also declined significantly resulting in a steady increase in life expectancy. In addition, due to large scale rural labor migration, China rural and agriculture feminization and aging became a common phenomenon.

1.1 (a) Sociocultural Context at Country level

8. **The poverty context:** Four decades of high economic growth paid great dividend to well-being of Chinese people. The number of rural poor had declined to about 5.51 million by end of 2019 with poverty incidence drop to 0.6%. The authorities are confident that impact of Covid-19 will not impede achieving this milestone of eradicating the extreme poverty by end of 2020. The government of China is likely to eradicate extreme rural poverty, measured against the prevailing national poverty standards (i.e. approximately US\$1.90/day), by 2020 - making China the first developing country to achieve SDG1, ten years ahead of the global target. However, sustaining this achievement, reducing inequalities (between coastal and western provinces, urban and rural areas, and among population i.e. relative poverty), and avoiding that the people moved out of poverty fall back into poverty will remain priorities for the government in the years following 2020.
9. **The rural development context.** China rural area still abode a large number of rural population, nearly 600 million Chinese, about 40 percent of the population. China's rural areas are going through a fundamental transformation. Over the past decades, China has experienced a massive migration of the active workforce from the rural to the urban areas due to the gap between the urban and rural salaries and the limited income-generating opportunities in the rural areas. Rural villages today are characterized by a population which mainly comprises elderly, some middle generation women taking care of the elderly parents (the so-called "left-behind women", who represent about 60% of the labour force in rural areas), young children, and sick and/or people with disabilities. Rural families from poverty vulnerable households are often dependent on the remittances provided by migrant worker family members, complemented by some income from production and local labour. The contribution of agriculture to the rural household income is reducing (an estimated 10-20 percent in poor rural areas, less than 10 percent nationally), and income-generating opportunities are in "adding-value", not in production. Today, about 40% of the population is registered in rural areas. This percentage is expected to drop to 31% by 2030, furthering the urban-rural divide, unless measures are taken to economically develop the rural areas. During the Covid-19 lockdown, nearly 200 million migrant workers left for their homes (there are roughly 250 million migrant workers in china and some 80% were affected by covid-19) and remained out of jobs for nearly three months. Though government has set a fund to assist these migrant workers with some cash/subsidies, the overall impact on rural household income will be far reaching, and yet to be assessed, as 45% of rural household income comes from these migrant workers.
10. **The government's 'Rural Revitalization Strategy':** In response to this prevailing situation, the government has recently coined a "rural revitalization" strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of

rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), creation of employment opportunities, and comprehensive infrastructure development - among other strategies. The present IFAD project is supporting this government strategy to demonstrate successes of rural revitalization in inclusive but innovative way.

Gender and social inclusion

11. The propose project contributes to reduce the gender gap. As of end-2015, women comprised about half of the 56 million rural poor population in China.¹ According to State Statistic Bureau survey in the nationally designated poor counties, the degree of poverty was greater among women than among men. In 2010, women's poverty incidence was 9.8% while men's was 9.4%, and the incidence of low-income women was 0.6 percentage points higher than that of men. Rural women's average level of education in Midwestern China was 6.8 years, which was 0.8 years less than those in Eastern China.
12. The majority of labor force of female is engaged in agriculture, about 80.6%, mostly in primary industry as compared to 58.8% of male labor in 2017². According to State Statistic Bureau of China, the education level of female labor in poor area was far behind that of male labor.

Table 1. Education level of Female/Male labor in poor area of China

Education level	Female labor (%)	Male labor (%)
No school	11.9	3.7
Primary school	39.4	29.0
Middle school	40.4	51.7
High school	5.9	11.5
College and above	2.4	4.1

Source: Poverty Monitoring Report of Rural China 2018

¹ X.L. Wang and R. Gao. Poverty Reduction of Rural Women: Objective, Challenge and Policy Option. Collection of Women's Studies, No. 6 Ser. No. 138, Nov. 2016. Pages 5-8.

² Department of Household Surveys, National Bureau of Statistics of China. Poverty Monitoring Report of Rural China (2018). China Statistic Press, Dec. 2018.

Ethnic Minority and Poverty

13. There are fifty-five ethnic minorities in China. Being the main habitats of the ethnic minorities, eight western provinces including Inner Mongolia, Guangxi, Guizhou, Hunan, Tibet, Qinghai, Ningxia and Xinjiang named Eight Minority Province/Autonomous Region (*Minzu Bashengqu*) due to ethnic minority concentration. According to National Ethnic Affairs Commission, there were 421 minority autonomous counties among 832 national- designated poor counties, accounting 51%. Similarly eleven of fourteen contiguous poverty blocks are located in the key minority area. The poverty incidence of key minority area has been remained higher than the national average, and the share of key minority area in country poor population increased 3.5 percentage point between 2010 to 2017³

Rural Youth

14. Since 1980s when China economic reform started, rural labor has been being migrated to urban on a large scale majorly due to the income gap between rural and urban. According to State Statistic Bureau, there was 179.69 million rural labor migrated to urban in the third quarter by 2017⁴. The rural labor under 40 years old was the majority of the labor migration, and 66% of them migrated to eastern China⁵. With such big scale rural labor migration, China rural and agriculture feminization and aging became a common phenomenon. However, COVID-19 prevented rural labor migrating to urban and reduced the employment opportunities as well, and rural youth are eager for employment and business opportunity in rural.
15. In September 2018, central government issued “Strategy Planning for Rural Revitalization (2018-2022)”, to promote rural revitalization of industry, human resource, culture, ecology and organization. Obviously, rural youth is the key human resource for rural revitalization, and achievement of rural revitalization will create opportunity to pull youth back to rural. Therefore, The Central Committee of the Communist Youth League (CYL) issued “Comments on Carrying out the Action on Contributing to Rural Revitalization”, with the objective of “fostering youth force of understanding agriculture, Loving rural and farmer”. CYL would focus on fostering local youth, facilitating migrated youth back to rural, mobilizing contribution of other youth, to provide youth talent opportunity for career advancement in rural.

³ National Ethnic Affairs Commission. Poverty Monitoring Result of Minority Area (2017). <http://www.gov.cn/xinwen/2018-08/15/5313944/files/a0182850dccb49998471b5b3d584c279.pdf>

⁴ National Bureau of Statistics. <http://data.stats.gov.cn/search.htm?s=2017%20%E5%85%A8%E5%9B%BD%20%E5%A4%96%E5%87%BA%E5%8A%A1%E5%B7%A5%E5%8A%B3%E5%8A%A8%E5%8A%9B>

⁵ Xu Xiaohua, et al. The Trend Forecast and Management of the Chinese Agricultural Surplus Labor Transfer During 2014—2030. *Management Review*, Vol. 30, No. 1, Jan. 2018. 221-229

16. The proposed project would focus on fostering local youth, facilitating migrated youth back to rural by giving them business start-up ideas and opportunities. In addition, the project would also support the Chinese government 'Mass Rural Youth Volunteer Program', which would facilitate sending over ten million of young volunteers from large cities to rural areas⁶.

Nutrition Situation Analysis

17. China has made significant progress in recent decades in improving malnutrition. Overall situation is improving drastically. China reduced the level of undernourishment in the country from 23.9 percent in 1990-92 to 9.3 percent in 2014-16.

Rates of child malnutrition are also dropping. From 1990 to 2010, the number of underweight children under 5 fell by 74 percent and rates of stunting dropped by 70 percent. Current levels are lower than most other developing countries.

18. Similarly, the nutrition status of children and adolescent aged 5-19 has improved remarkably over the last 15 years as shown in graph below where the underweight reduced to 17% in year 2015 from 27% in 1999. However the overweight and obesity has greatly worsened over the same period for same population group.
19. Rural-urban disparities, however, have a big impact on nutritional status. The risk of underweight and stunting is 3-4 times higher for children in rural areas than for those in cities. According to WHO World Health Report 2017, (having data from 2013) the prevalence of stunting, underweight and wasting among children under 5 were 8.1%, 2.4%, and 1.9% in the overall China showing great achievement in nutrition.
20. On the other hand, better nutrition has significantly improved the health and quality of life of Chinese children. Mortality in under 5s due to malnutrition dropped from 22 to 13 percent between 2000 and 2010. Meanwhile The food supply has also improved remarkably, and undernourishment of population reduced from 16% in 2000 to 9% in 2016. But overweight and obesity are becoming prominent in cities, and gradually appearing in rural areas. The health and nutrition improvement in China population is also resulted from improved drinking water coverage and improved sanitation coverage. China's value in the Global Hunger Index fell from 25.1 in 1990 (serious hunger level), to 7.6 in 2018 (low hunger level).

⁶ Update on Key Developments in China, April 2019.

B. Provincial context (Hunan)

21. Hunan is located in the transition zone from Hunan-Guizhou Plateau to the hills of south Yangtzi River, and from Nanling Mountains to Jiangnan Plain. With 2.21% of the national territory and about 3% of the national cultivated land, about 5% Chinese citizen live in Hunan Province. There are 13 municipalities, one minority autonomous prefecture and 122 counties/districts in Hunan Province.
22. **Project Target Area:** The Project will be implemented in 10 counties within the four municipalities/prefectures of Chengde, Xiangxi, Shaoyang and Chenzhou in the North-East and Western part of Hunan Province (i.e. Shimen and Taoyunan counties in Chengde prefecture; Guzhang, Fenghuang, Luxi and Longshan counties in Xiangxi Tujia and Miao Autonomous prefecture; Shaodong, Daxiang and Longhui counties in Shaoyang prefecture; and Rucheng county in Chenzhou prefecture). Among them, six counties -- Shimen, Longhui, Guzhang, Fenghuang, Luxi and Longshan are located in contiguous poverty block of Wulin mountain area, and Rucheng was a part of contiguous poverty block of Luoxiao mountain area. Thus, seven of 10 counties are national-designated poor counties. In addition, Guzhang, Fenghuang, Luxi and Longshan counties are belong to Xiangxi Prefecture which is the only minorities inhabited prefecture in Hunan Province.

1.1

1.1 (b) Sociocultural context at province level (Hunan)

23. **Poverty profile.** There are 20 nationally designated poverty counties in Hunan Province. Among fourteen contiguous poverty blocks, Hunan shares two of them – Wulin mountain area and Luoxiao mountain area with 37 counties. Thus, 40 counties are categorized as poor counties at national level, which took about 5% of that in China. Besides, there are 11 provincial-designated poverty counties. Simultaneously with the poverty reduction achievement in China, poor population in Hunan reduced 9.86 million from 2010 to 2019, while poverty incidence decreased from 17.9% to 0.36% accordingly⁷. Although absolute poverty will be eradicated in these counties by 2020, they will remain vulnerable and with limited income opportunities.
24. The total rural population of ten project counties was 6.2 million in 2018, and 4.11% of them live in the project area. Farmers' net income per capita was CNY 9,846 in project area and CNY 13,950 in project counties, which was 69.9% and 99.0% of the provincial level. Besides, the average per capita farmland was 1.12 mu in

⁷ Hunan Poverty Alleviation Office.

project area and 1.07 mu in project counties, and that in five counties even less than 1 mu⁸.

25. According to the poverty rate data provided by county PMOs, the poverty rate of project counties was estimated as 10.79% in 2018 with 0.69 million poor population, while that of project area was 15.87% and 40,483, and the project area shared 6.05% of the poor people in the project counties. Based on the data provided, the average poverty rate of both project counties and project areas was higher than the provincial average.
26. According to the monitoring of local government, the major poverty causes at household level included natural disaster (flooding, drought, etc), disability, illness, education cost, lack of skill, lack of labor, lack of investment. However, illness, lack of investment and skill were recorded as the dominate reasons caused household poverty in the project area. Nevertheless, as the core industry in the project area, agriculture development is constrained by,
- (a) High proportion of poor population.
 - (b) Lack of strong and better educated labor due to labor migration.
 - (c) Poor agricultural infrastructure with low productivity.
 - (d) Insufficient agricultural productivity, and lack of processing facilities.
 - (e) Low processing rate of agricultural products with under-developed value chain.
 - (f) Natural disasters such as freezing damage.
 - (g) Inconvenient transportation condition.
27. **The characteristics of different wealth categories.** Village visits showed that the farm households in different location have slightly different livelihood pattern, and their wealth situation can be categorized into four groups.

Table 2. Households characteristics of different categories⁹

<i>Category</i>	<i>% of HH</i>	<i>Characteristics</i>
<i>Better-off</i>	10-15	High quality house with good decoration and enough electronic appliances including air-conditioner, expensive car. Kids in the school at county town fully taken care by guardian in renting

⁸ CPMO/PPMOs

⁹ The table is summarized from interviews of Wenxing Bai Village and Jiaju Bai Village in Yunlong County, and Dapingtan Village in Yongping County; all of them are poor villages identified by county poverty alleviation office. China official poverty line is \$1.9 US per capita/day

<i>Category</i>	<i>% of HH</i>	<i>Characteristics</i>
		apartment. Each household has more than CNY100,000 annual income from agro-business or other business.
<i>Average-high</i>	20-25	Good housing condition with good decoration and enough electronic appliances, pickup truck or minivan. Kids in local school or school at county town taken care by guardian who engaging in labor work in county town. Each household has CNY50,000-80,000 annual income from small business, or comparatively big agricultural products such as pig, tea, Chinese herb, maize, etc., or at least two migrant labors.
<i>Vulnerable</i>	60-65	House with simple decoration and necessary electronic appliances, three-wheeled motorcycle or motorcycle. Kids in the local school. Annual income around CNY30,000 per household mainly from migrant labor, and agricultural production such as tea, Chinese herb, pig, maize, etc.
<i>Poverty</i>	10-15	Registered poor households greatly supported by the Targeted Poverty Alleviation Programme. Poor skill, health condition and housing condition. About 1/3 households had motorcycle. Kids in local school, and mostly to vocational high school afterwards. Annual income of CNY10,000 - 20,000 per household from agricultural products and/or seasonal migrant labor work.

Information source: Interview and discussion in two villages.

28. **Labour and Migration Situation.** Migrant labour income dependency accounts to 50.82% of households due to low income from agriculture. 57.66% of the labour in project counties were engaged in migrant labour work, and youth was the majority of migrant labour. As long as there is a surplus labour, migrant labour income is significant source for poor households.
29. **Access to technology.** The Agro-Technical Extension Stations at county and township levels are the main technical service providers throughout the country. According to the data from county PMOs, only 4.17% rural labours were trained by the government extension system in 2018; 44.53% trainees were women, and 70.89% were ethnic minorities. The labour with education of high school and above made up 1/3 in the project counties, but that was only 1/4 in the project area.

Nutrition status.

30. Due to high economic growth complementing with enormous progress in poverty reduction over the past forty years, China has made significant progress in improving the food security and nutritional status of its people. Similarly Hunan has given high importance to reducing child malnutrition in its 'Hunan Child Development Plan (2011-2020)', and clear targets, in terms of prevalence of severe malnutrition, prevalence of moderate to severe anemia, and anemia prevalence of primary and secondary students, are set for the province.
31. Limited data from Shaodong County and discussion with other counties showed that some of the targets (e.g. prevalence of anemia of children under 5 maintained under 12%) have already been achieved, suggesting the overall situation in the project area is not alarming and in line with the objectives of the provincial development plan.

Rural youth.

32. Like other parts of country, Hunan Communist Youth League (HCYL) is the most extensive youth organization in the province, and positioned itself as the sole organization systematically serving for youth development widely on youth ideology and morality, youth education, youth health, youth career-orientation and employment, youth social inclusion and participation and youth social security. HCYL has very strong linkage through grass root. Besides CYL at provincial, prefecture, county and township levels, CYL also has its branch with 3 to 5 members at village level targeting youth between 18 to 45 years old, and CYL branch secretary is also the member of village committee.
33. About half of the workforce in the project area is engaged in migrant labour, and 2/3 of the migrant workers are represented by youth under 45 years old of age. To revert this trend, a central pillar of the new rural revitalization strategy focuses on creating new employment opportunities in the rural areas to retain or attract back the active population to the rural areas, particularly young people. The project will contribute to this objective by (i) providing incentives and support to New Economic Entities (NEEs), particularly young and - considering women represent the majority of the workforce in the rural areas - women, to start their own business and benefit from employment opportunities in the project area.
34. For more job opportunities and better income, a big proportion of youth labours migrated out of the county where far from the family, whom only could be back home once a year during Chinese New Year. According to staff of Youth League in Shimen and villagers, each migrant labor normally earned CNY3,000 to 4,000 monthly, but with high urban living cost, maximum CNY 20,000 to 30,000 could

be saved for the household annually. As long as there is a surplus labour, migrant labour was significant income source for poor household, but it was not easy for poor labour to stay and to get good payment due to lower education level and weaker social network.

Ethnic minorities.

35. In Hunan Province, ethnic minority population took about 10% of the provincial population, and Tujia and Miao are the dominant minorities. Even the minority population live scattered through the province, they comparatively concentrated in Western and southern Hunan¹⁰. Xiangxi (western Hunan) is the only minority autonomous prefecture in Hunan Province. Five of ten project counties are minority inhabit area. Situated in Xiangxi Tujia and Miao Autonomous Prefecture, Luxi, Fenghuang, Guzhang and Longshan are the main settlement area for Tujia and Miao in China, and the minorities composed big proportion of the population. Besides, Shimen is a concentrated area of Tujia, where Tujia made up more than half of the population according to the county government. In addition, there was more than 17% of minority population (mainly Yao and She) in three minority townships and 44 minority villages in Rucheng. Overall, about 30% of the population in the project area belong to ethnic minority groups. Main ethnic minority groups in the project area are: Tujia, Miao, Hui, Yao, She, Bai, Zhuang, Uygur and Yi people. These minority are now without traditional institutions and being fully integrated in mainstream society. They have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have no distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and difficult terrain historically. Government policies targeting rural poor and vulnerable households in Hunan province do not differentiate based on ethnicity, but target based on poverty indicators. The project engagement approach with pro-poor cooperatives and agribusinesses will be based on informed consultations to ensure that particular livelihood strategies of the different ethnic groups are taken into account, where existing. Even though an FPIC agreement will not be signed, since there are no traditional institutions and authorities to provide for a such signature, FPIC principles will as such be followed in the planning and formulation of project interventions.

Gender.

¹⁰ Ethnic Minorities in Hunan. <http://www.hunan.gov.cn/jxxx/hngk/rkmz/rkmz.html>

36. According to the sampling survey by the government, women population took 49.63% in 2018 in Hunan Province. Among them, 3.08 million women living in the project counties, and that figure was 114,750 in the project area. However, the male-female ratio was slightly varies county by county, and average proportion of women in project area were lower than that at both county and provincial levels. While most of the rural male labors are engage in migrated works, most of the rural women have to stay taking care of the family and agricultural production, and they account for more than 60% of rural labors working on agriculture in the villages.
37. **Decision making in household and community.** Mostly the patrilineal system is practiced in the project area. In general, the overall socio-economic status of women is poor than men in terms of education, health and access to technical and information services. Most women still cultivate the land under their husbands' name due to the practice of traditional marriage pattern where men are registered as family head. Therefore, women with formal household head title took 15.51% in project counties and 12.32% in project area.

Following the common practice of official and uniform administration system in China, most affairs at the community level are officially managed by villagers' committees in administrative villages with village committee head where men are the major decision makers at all levels. The women village leadership in the project counties accounts only 10.08% while 11.02% in project area.

38. **Labour Division:** Men generally play the key role in transactions and heavy manual work, while women take care of daily farming activities that require less manual labour but are more constant and time consuming. Often women end up the main labour for farming activities due to migration of men. The overall women labour force in project counties are about 46% whereas almost 60% accounts in village agriculture labour force.
39. **Women's participation in New Economic Entities.** There were 6,091 cooperatives, 1,111 agro-enterprises and 3,451 family farms in ten project counties mostly led by men and dominated by male members despite the fact that key labor force in the project area is dominated by women. Nevertheless, field visit of the mission found that women played significant role in the cooperative not only as the member, but also were executive heads, and they were keen to play significant role in NEEs.

1.2 Natural resources and their management

40. The targeted counties are located in the four prefectures (cities) in Hunan. Common nature conditions in these areas are low and middle mountain sand hilly terrain topography, subtropical monsoon humid climate, comparatively rich precipitation. Elevation level ranges from 40 meter to 2,200 meter above sea level; and average

annual precipitation ranges from 1,200 mm to 1,500 mm. The rainfall mainly occurs from April to August, which accounts for 63 percent of total precipitation of the whole year. Rainfall in spring and summer accounts for 36 percent and 35 percent of the annual precipitation respectively, while 17 percent and 12 percent occurs in autumn and winter. Uneven rainfall distribution within the year and between years, seasonal water shortages and droughts are a common phenomenon. Shaodong county, Longhui county and Daxiang county, which are located in the drought corridor of Heng-Shao¹¹, experience significant shortage of water. Underdeveloped infrastructure systems, especially rural roads and agriculture water management systems are among the major constraints to local agriculture and rural development.

41. Taoyuan County lies in the northwest of Hunan Province (between 28°24'–29°24'N, 110°50'–111°36'E), which covers 4,442 km² of total land area with approximately 97×10⁴ people distributed in this region. The average annual temperature and precipitation are 16.6°C and 1,433.1 mm, respectively. There are 48 rivers in the county, among which Yuanjiang River is the longest, crossing from west to east. The county is rich in forestry resources, with a forest coverage of 58.4%. The cultivated land area is 965 km², accounting for 21.7% of the total land area. The total planting area of crops is 2,082 km², including 1,212 km² for grain crops, 528 km² for oil plants, 43 km² for cotton and 204 km² for vegetables.
42. Shimen County is located in the northwest of Hunan Province (between 29°16'–30°08'N, 110°29'–111°33'E). The area of county is 3,973 km² and the population is about 20.6×10⁴. Average annual precipitation is 1,373.8 mm. The average annual temperature is 16.8°C. The county is rich in water resources comprising of 236 rivers flowing through the county, providing 3.7 ×10⁴ m³ of water resources. The total cultivated land area is 486 km²; among them, the citrus area is 293.7 km². Citrus, tea and livestock breeding are pillar industries with agricultural characteristics.
43. Shaodong city is located in the hilly area of central Hunan Province (between 26°50'–27°28'N, 110°30'–112°05'E), which is of infiltration erosion landform. The city covers 1,769 km² of total land area with approximately 134.2×10⁴ people. The average annual temperature and precipitation are 16.8°C and 1,272.8 mm, respectively. Precipitation is lower than the average level of the whole province,

¹¹Heng Shao Drought Corridor Comprehensive Management Plan. Hunan Provincial Development and Reform Commission, Hunan Water Resources Department, August 2012

and it is a with scarce water resources. There are Zhengshui, Shaoshui and Ceshui system in the city. In addition, rice (641 km²), corn (92 km²), rape (130 km²), traditional Chinese medicine (46 km²) and orange (35 km²) are leading agricultural industries.

43. Fenghuang County lies in the west of Hunan Province (between 27°44'–28°19'N, 109°18'–109°48'E), with a total area of 1,758 km² and a total population of 43.0×10⁴. The mean annual temperature ranges from 12.6 to 16.7°C and an annual precipitation from 1,308.1mm to 1,423.2 mm. The county is rich in water resources and there are 156 rivers flowing through the county. The cultivated land area is 333 km², and the total planting area of crops is 271 km², including 177 km² for rice, 60 km² for oil plants, 54 km² for Mandarin orange. In addition, Fenghuang is a national historical and cultural city, one of the first batch of China's top tourist counties.
44. Rucheng County lies in the southeast of Hunan Province (between 25°19'–25°52'N, 113°16'–113°59'E), with a total area of 2,401 km² and a total population of 40.0×10⁴. The average annual temperature and precipitation are 16.6°C and 1547.1 mm, respectively. The county is rich in forest resources, with a forest coverage of 73.7%. There are 236 rivers flowing through the county, and the county has hot springs. The total cultivated land area is 268 km², including 187 km² for rice, 94 km² for vegetables, 82 km² for fruits and 43 km² for tea; among them, Chaotian pepper considered to be the advantage area of Chinese characteristic products, planting about 67 km².
45. Longhui County is located in the southwest of central Hunan Province (between 27°19'–27°40'N, 110°15'–110°38'E), with a total area of 2,866 km² and a total population of 120.0×10⁴. The average annual temperature and precipitation are 16.9°C and 1,293.2 mm, respectively. The rivers in the county belong to Zishui system and Yuanshui system, with average annual surface runoff of 2.2 Gm³. The total cultivated land area is 733 km², and high quality rice (116 km²), traditional Chinese medicine (227 km²), characteristic fruit (20 km²), vegetable (1 km²) and tea (1 km²) are well known.
46. Longshan County is located in the north of central Hunan Province (between 28°45'–29°30'N, 109°15'–110°53'E), with a total area of 3,131 km² and a total population of 60.6×10⁴. The average annual precipitation is 1400.0 mm, and average annual temperature is 15.8°C. There are lots of natural landscapes in Longshan, such as Wulongshan Grand Canyon, Luota stone forest, Taiping Mountain Forest Park, etc. The forest coverage is 38.89%, and the shrub grass coverage is 31.91%. In addition, the total cultivated land area is 342 km², including 171 km² for rice, 76 km² for rape, 55 km² for lily. The lily industry has become a pillar industry in Longshan County.

47. Luxi County is located in the west of Hunan Province (between 27°54'–28°28'N, 109°40'–110°14'E). The area of the county is 1,565 km² and population is about 31.7×10⁴. The average annual temperature and precipitation are 16.9°C and 1326.0 mm, respectively. The county is rich in water resources and there are 127 rivers flowing through the county. The planting area of citrus is 155 km², of which 147 km² is Ponkan, which is known as “the hometown of Ponkan in China”. Luxi glass pepper planting area is 37 km², oil tea planting area is 33 km².
48. Daxiang district, Shaoyang City is located in the middle of Hunan Province (between 27°4'–27°14'N, 111°22'–111°35'E). The area of county is 215 km² and population is about 38.3×10⁴. The average annual precipitation is 1323.0 mm, and average annual temperature is 17.1°C. Zijiang, a tributary of the Yangtze River, flows through Daxiang district, where a total runoff is 11.5 Gm³. The cultivated land area is 84 km² and total planting area of crops is 70 km², including 10 km² for citrus and 26 km² for vegetables.
49. Guzhang County is located in the west of Hunan Province (between 28°24'–28°45'N, 109°4'–110°16'E), with a total area of 1,297 km² and a total population of 14.4×10⁴. The average annual precipitation is 1,475.9 mm, and average annual temperature is 16.0°C. County has a forest area of 1,020 km², and the forest coverage rate has exceeded 70% of total area. There are 63 rivers flowing through the county. The total cultivated land area is 77 km², including 45 km² for rice, 29 km² for citrus.

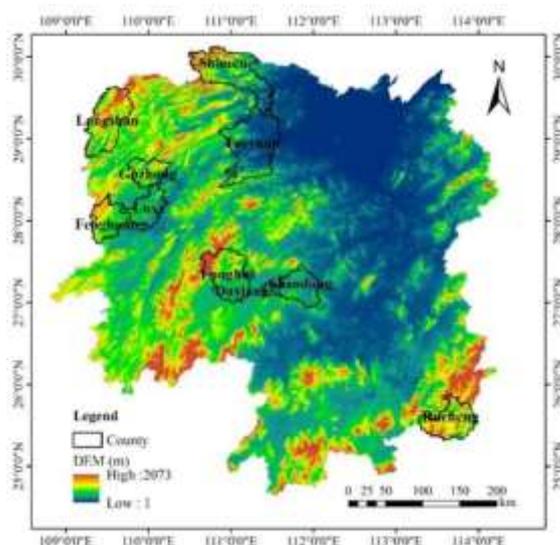


Fig 1.1 Ten targeted counties are located in the four prefecture (cities) in Hunan

1.3 Climate

50. The current mean climatic state and dry, wet, cold and heat extreme events of 10 counties, including Shimen, Taoyuan, Longshan, Guzhang, Luxi, Fenghuang,

Longhui, Shaodong, Daxiang and Rucheng in Hunan Province, were investigated by using the gridded meteorological observation data from 1981 to 2010. Based on current climate analysis, the future climate condition and change under RCP 8.5 in 10 counties, including mean state and drought, flood, frozen and high temperature risk, were analyzed with the simulation of 5 ESMs (Earth System Models) in 1981-2010 and 2021-2050.

51. Meteorological observation data and climate scenarios simulation data are employed in this climate analysis. The details are as follows:
52. The meteorological observation data is the gridded daily dataset of CN05.1, which generated by Wu and Gao (2013) from National Climate Centre, based on interpolation from 2,416 weather stations. As did by Xu et al. (2009), the CN05.1 dataset is constructed following the ‘anomaly approach’ during the interpolation. In the ‘anomaly approach’, a gridded mean climatology is first calculated by thin-plate smoothing splines, then a gridded daily anomaly derived via an angular weighting method is added to it. The geographic coverage of the dataset is 69.75°E-140.25°E, 14.75°N-55.25°N, in which the range of valid data is mainland China. The horizontal resolution of CN05.1 is 0.25°×0.25°, but in order to keep consistent with the resolution of the climate scenario simulation data, we skipped its grid point to 0.5°×0.5°. We used the daily temperature and precipitation of all grids in Hunan province from 1981 to 2010.
53. Climate scenarios simulation data is derived from 5 ESMs used in Coupled Model Inter-comparison Project Phase 5 (CMIP5). The 5 ESMs simulate the global climate from 1951-2099 under Representative Concentration Pathways 8.5 (RCP 8.5, for short) (van Vuuren et al., 2011a, 2011b; Riahi et al., 2011), and some variables commonly used in climate change work such as temperature, precipitation were interpolated into 0.5° × 0.5° horizontal resolution and bias corrected with respect to historical observations by Hempel et al. (2013a, 2013b) to remove systematic errors. The 5 ESMs are respectively GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, MIROC-ESM-CHEM and NorESM1-M. We calculate ensemble of 5 ESMs using the interpolated and corrected daily mean temperature and precipitation of 1981-2010 and 2021-2050.

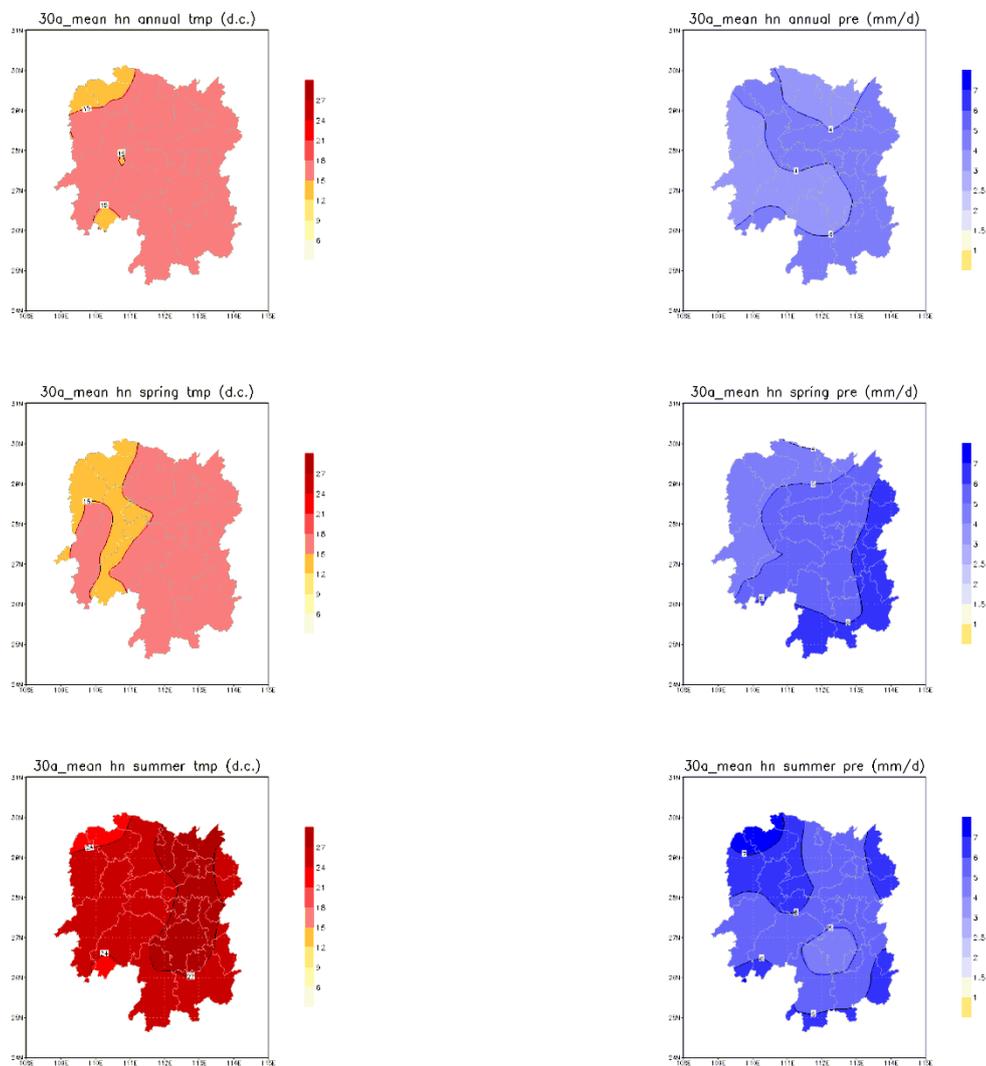
1.3.1 Current climate

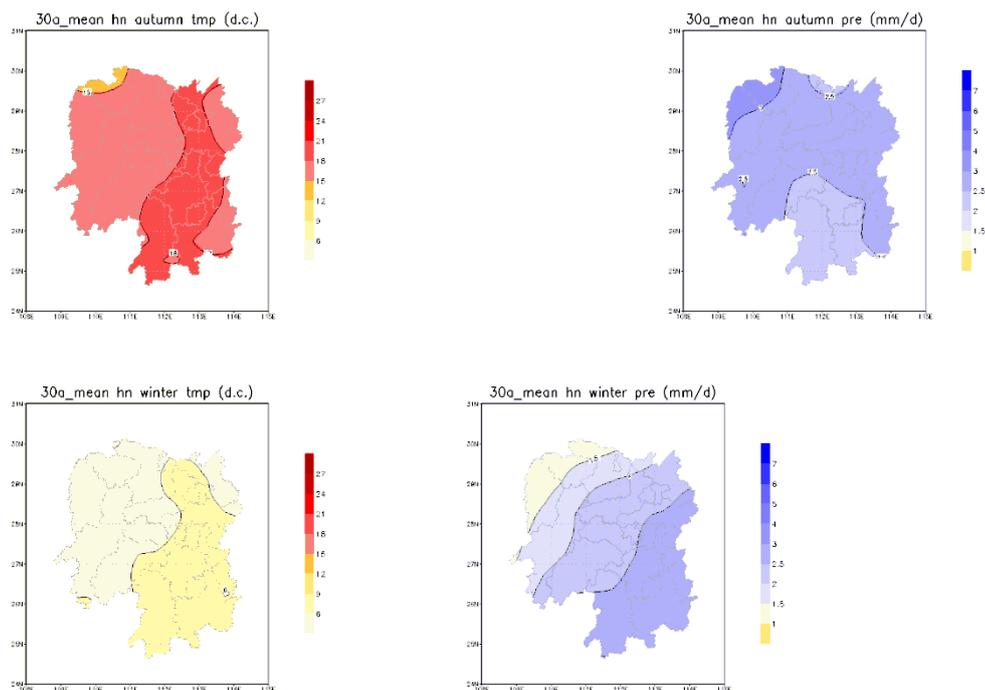
a) Climate mean state

54. The annual and four seasons’ mean temperature and precipitation of the ten counties during 1981-2010 are shown in figure 1.2. Summer is the hottest season and winter the coldest except Longshan county where the annual mean temperature of other 9 counties is between 15-18°C, while the annual mean temperature of Longshan county is between 12-15°C. The mean temperature in the northern Longshan county is between 21-24°C in summer, while the mean temperature in the southern Longshan is between 24-27°C as in the other 9 counties. In winter, the

mean temperature in Rucheng, Shaodong and Daxiang is between 6-9°C, while the mean temperature in other 7 counties is lower than 6°C. The mean temperature of 10 counties in spring and autumn is basically between 12-18°C.

55. The annual precipitation is about 3-4mm/d, with the most precipitation occurring in summer and the least in winter. The precipitation in spring is slightly less than that in summer, followed by autumn. The county with the most obvious difference between dry and wet is Longshan, with the mean precipitation of about 7mm/d in summer and less than 1.5mm/d in winter.
56. In general, ten counties are warm and humid in summer, and relatively cold and dry in winter.





*Fig.1.2 Mean temperature and precipitation in Hunan province from 1981-2010
Left: mean temperature (°C); Right: precipitation (mm/d)
From top to bottom are the mean values of years, spring, summer, autumn and winter respectively*

b) Extreme climate

57. According to the agricultural industrial characteristics to be developed in the project design of ten counties, we selected four indicators, namely consecutive dry days (CDD), rain for 5 consecutive days (R5D), frozen days (FZD), and mean high temperature days (HTD), to represent dry, wet, cold and hot extreme situation respectively. The greater the index value is, the stronger the extreme condition is.
58. Current extreme situations of dry, wet, cold and hot are shown in Figure 1.3. For the extreme dry condition, it is the most obvious in Rucheng, while mild in Shaodong, Daxiang, Longhui, Shimen, Taoyuan, with slighter in Luxi, Guzhang and Fenghuang, and tslightest in Longshan. For the extreme wet condition, it is the most severe in Guzhang, and the slightest in Shaodong. For the extreme cold condition, it is the most severe in Longhui, and slightest in Rucheng. For the extreme hot condition, it is the most severe in Shaodong, and the slightest in Longshan and Rucheng.

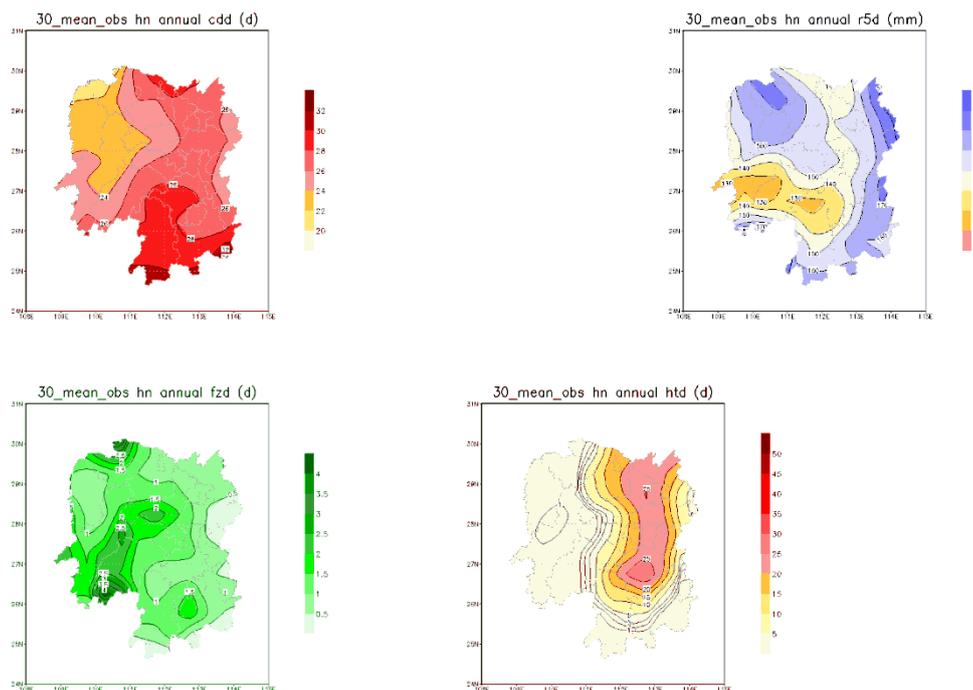


Fig.1.3 Average drought and flood in Hunan province from 1981 to 2010

Upper left: consecutive dry days (d/a); Upper right: rain for 5 consecutive days (mm/5d);

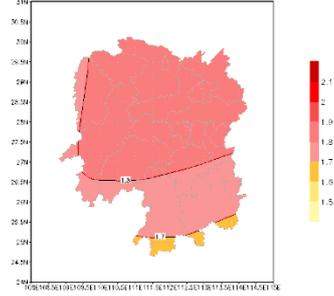
Lower left: frozen days (d/a); Lower right: mean high temperature days (d/a)

1.3.2 Future climate and climate change

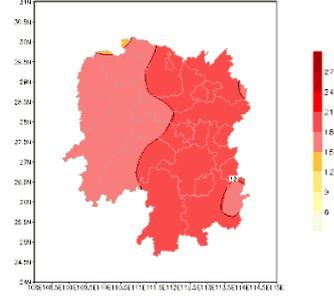
a) Climate mean state

59. Under RCP 8.5, it will be warmer in the ten counties in the future (figure 1.4). The warmer is most significant in autumn for the ten counties, while moderate in spring in Shimen, Taoyuan, Longshan, Guzhang, Luxi and Fenghuang, and in winter in Longhui, Daxiang, Shaodong and Rucheng.
60. In summer, the mean temperature in 10 counties rise to above 24°C, and sometimes the temperatures reach above 27°C in Taoyuan, Luxi, Daxiang and Shaodong. The project design will need to take into consideration potential occurrence of heat caused by high temperature during summer. In winter, the mean temperature in 10 counties rise to above 6°C, which may be beneficial to the reduction of freezing disaster.

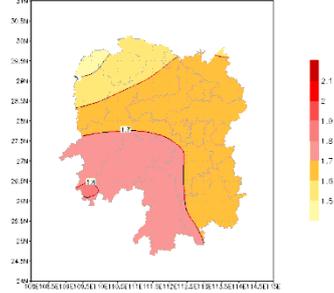
30a_change RCP8.5 hn annual tmp (d.c.)



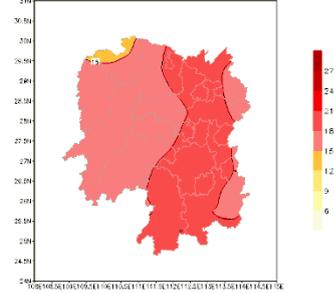
2021-2050 RCP8.5 hn annual tmp (d.c.)



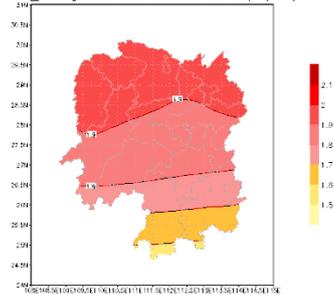
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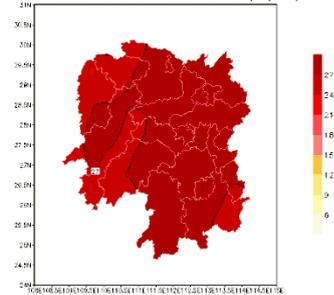
2021-2050 RCP8.5 hn spring tmp (d.c.)



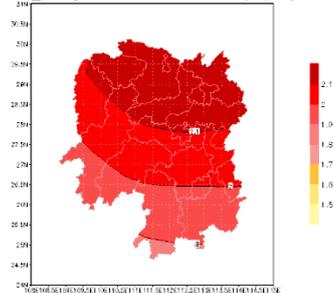
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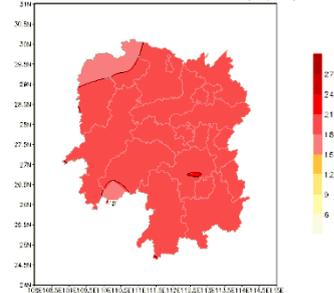
2021-2050 RCP8.5 hn summer tmp (d.c.)



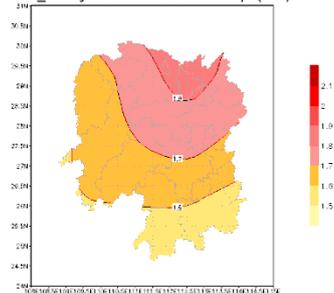
30a_change RCP8.5 hn autumn tmp (d.c.)



2021-2050 RCP8.5 hn autumn tmp (d.c.)



30a_change RCP8.5 hn winter tmp (d.c.)



2021-2050 RCP8.5 hn winter tmp (d.c.)

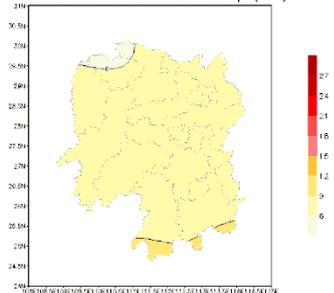
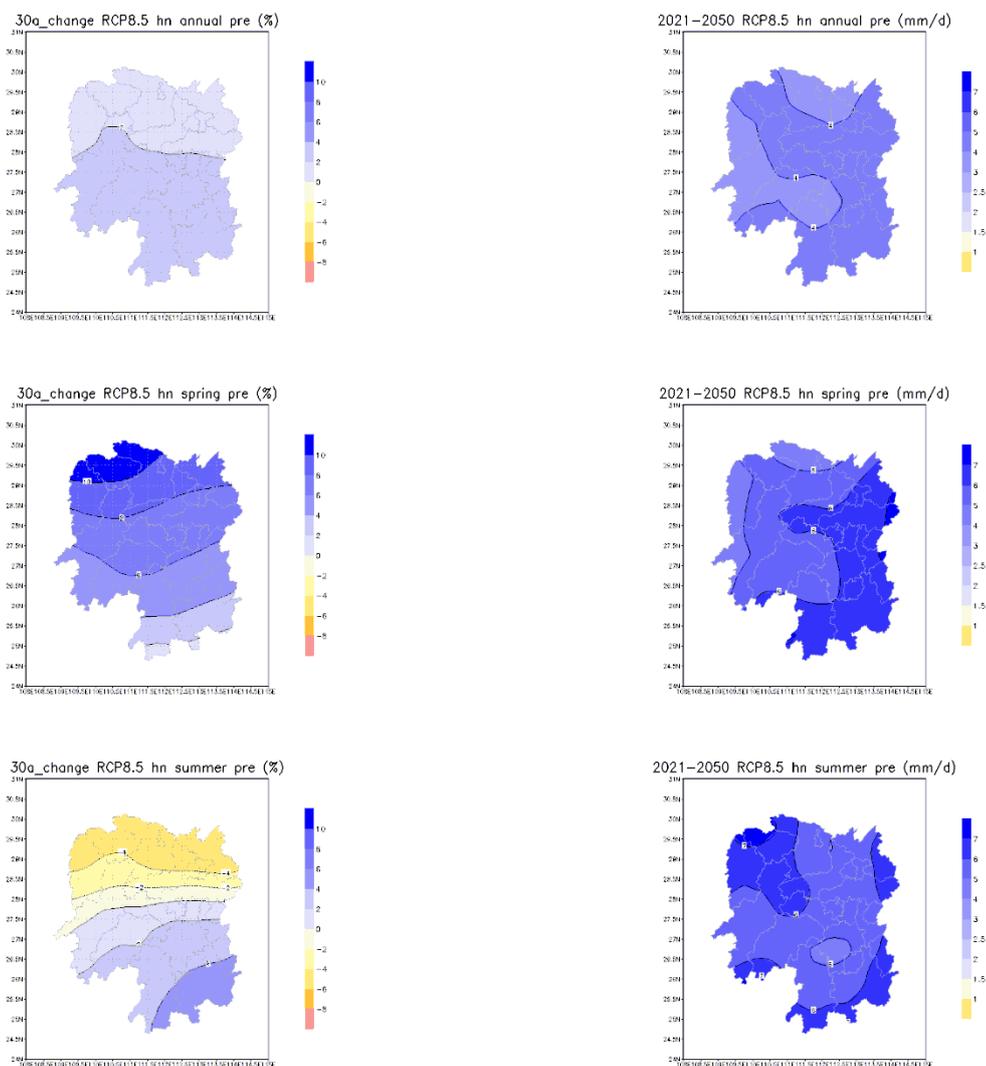


Fig.1.4 Change of mean temperature in Hunan province from 2021-2050 under RCP 8.5

Left: the change of mean temperature of 2021-2050 relative to 1981-2010(°C); Right: mean temperature of 2021-2050(°C)

From top to bottom are the mean values of years, spring, summer, autumn and winter respectively

61. Under RCP 8.5, annual mean precipitation generally increased in the ten counties (figure 1.5), but mainly increase in spring. In winter, the season with the least precipitation in current climate, will have less precipitation in the future (except for that in Rucheng). The county with the largest decrease in precipitation in winter is Taoyuan, with 6-8% less than that in current times.
62. Except for Shimen and Longshan counties in the north of Hunan province, where the precipitation will increase more than 10% in the spring in the future, the precipitation in other seasons and counties/regions will not change much, so the spatial distribution of precipitation in the future have no obvious difference from that in current climate.



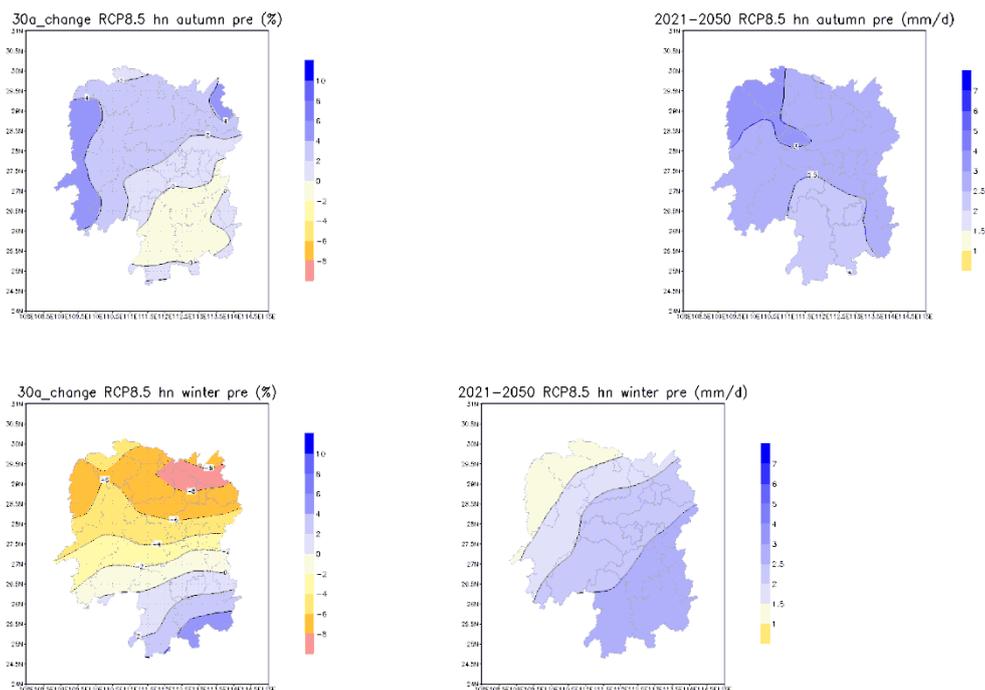


Fig.1.5 Change of precipitation in Hunan province from 2021-2050 under RCP 8.5

Left: the change of precipitation of 2021-2050 relative to 1981-2010 (%); Right: mean precipitation of 2021-2050 (mm/d)

From top to bottom are the mean values of years, spring, summer, autumn and winter respectively

b) Extreme climate

63. Under RCP 8.5, the number of consecutive dry days in the ten counties will increase from 2021 to 2050 (figure 1.6), especially in Taoyuan county, with an average increase of more than 4 days per year and an increase of 5 days per year in some areas. In Rucheng, where the drought is most obvious at present, the number of consecutive dry days in the future will not change much, increasing by about one day per year on average.
64. During 2021-2050, Rucheng still has the largest number of consecutive dry days, with half of its regions experiencing an average of more than 32 days per year. The CDD in Shaodong is the second, the average annual consecutive dry days is more than 30 days. Longshan has the fewest consecutive dry days, with half of the areas under 24 days per year.

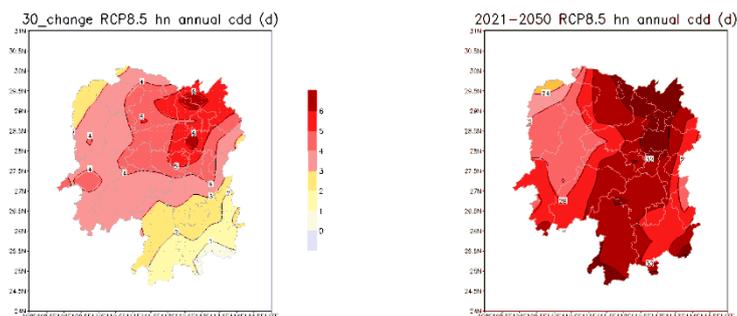


Fig.1.6 Changes of maximum consecutive dry days in Hunan province from 2021-2050 under RCP8.5
Left: the change of CDD of 2021-2050 relative to 1981-2010 (d/a); Right: mean CDD of 2021-2050 (d/a)

65. Under RCP 8.5, from 2021 to 2050, rain for 5 consecutive days in the ten counties will increase, especially in Rucheng, where will increase by more than 10mm in most areas. The increment of R5D in Longshan will also be not small, increasing by more than 8mm and more than 10mm in some areas. In Shaodong, which has the lowest flood risk in modern times, R5D change in the future is the least, with an average increase of about 2mm days.
66. From 2021 to 2050, Guzhang still receives the most precipitation for 5 consecutive days, with the precipitation in most areas reaching more than 170mm for 5 consecutive days. Shaodong will have the smallest R5D, with most of the precipitation for 5 consecutive days being between 140 mm and 150mm.

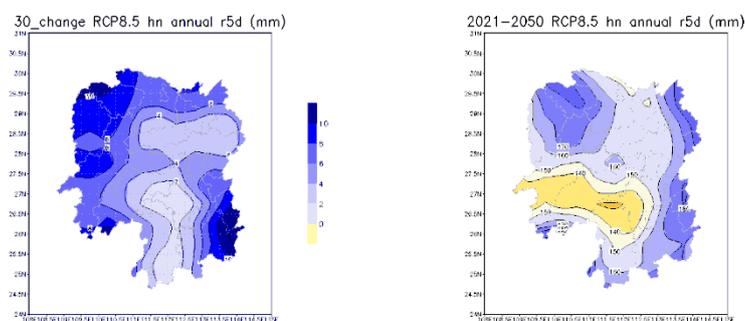


Fig.1.7 Changes of rain for 5 consecutive days in Hunan province from 2021-2050 under RCP8.5
Left: the change of R5D of 2021-2050 relative to 1981-2010 (mm/5d); Right: mean R5D of 2021-2050 (mm/5d)

67. Under RCP 8.5., during 2021-2050, the number of frozen days in the ten counties will generally decrease, with the largest decrease in Longshan, which decrease 1.5-2 days per year on average, and the smallest decrease in Rucheng, which decrease less than 0.5 days.
68. Due to the general decrease in the number of frozen days in the future, from 2021 to 2050, the average frozen days is 0.5-1 days per year in some areas of Longhui and less than 0.5 days per year in Shaodong, Daxiang, Shimen and Longhui, and

the other counties/districts will have no frozen days, so the risk of freezing damage can be almost ignored.

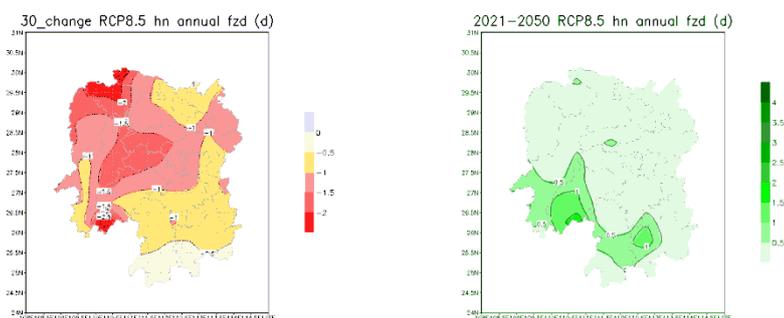


Fig.1.8 Changes of frozen days in Hunan province from 2021-2050 under RCP8.5
Left: the change of FZD of 2021-2050 relative to 1981-2010 (d/a); Right: mean FZD of 2021-2050 (d/a)

69. Under RCP 8.5, the mean high temperature days in the ten counties will increase significantly in the future. In Shaodong, the county with the greatest risk of heat damage in current times, the mean high temperature days will increase the most in the future, with an average annual increase of more than 30 days, while it will increase the least in Longshan, with an average annual increase of less than 15 days.
70. During 2021-2050, the number of mean high temperature days in Shaodong is the highest, most of which are over 40 days, and even over 45 days in some areas. Next is Taoyuan county, the average number of hot days is between 30-40 days per year. These two counties need to be vigilant against the occurrence of heat damage cause by high temperature in particular. At the same time, the other counties/districts also need to pay attention to heat damage. Even in Longshan county, where there is almost no risk of heat damage from high temperature, there will be 10-15 days of mean high temperature per year in the future, so the heat damage from high temperature cannot be ignored.

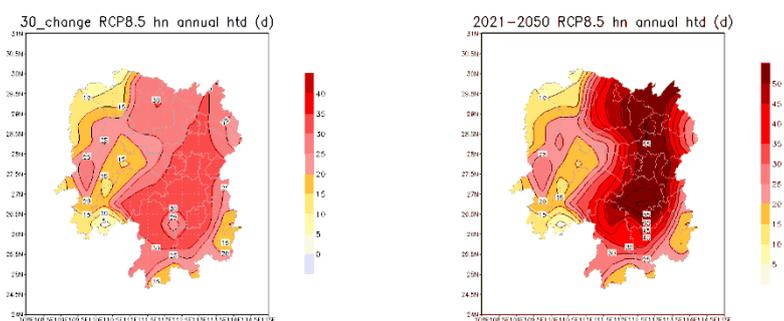


Fig.1.9 Changes of mean high temperature days in Hunan province from 2021-2050 under RCP8.5
Left: the change of HTD of 2021-2050 relative to 1981-2010 (d/a); Right: mean HTD of 2021-2050 (d/a)

2. Potential Project's impacts and risks:

2.1 Key potential social and environmental impacts

Project Structure

71. The project goal is to 'Increase rural livelihood resilience and inclusive sustainability'. The development objective is to 'Improve livelihood opportunities for vulnerable rural people in the project area, particularly youth and women, and increase their resilience to the impacts of climate change'.
72. This will be achieved by (i) strengthening and providing incentives to New Economic Entities to include poor households among their members, and introduce fair shareholding and benefit-sharing mechanisms (Ref. Sub-component A.1); (ii) stimulating additional and more diversified income opportunities, particularly for young and women, in the project area, by providing business services and stimulating and strengthening entrepreneurship opportunities and capacities (Ref. Sub-component A.2 and A.3); and (iii) addressing some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities (Ref. Component B). Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options - and plan and decide accordingly, and improving the climate-resilience of the infrastructure system.
73. The project is organized along two complementary components, 1) Inclusive Private Sector Investment Models; and 2) Climate-proofed Public Infrastructure Planning and Development; supported by a third cross-cutting component, 3) Project Management, M&E, Knowledge Management and Policy.
74. **Key indicators:** The impact of the project would be measured through the following key indicators: (i) increase in households' income and livelihood assets; (ii) increase in NEEs' profits; (iii) increase in number of youth/women-led enterprises; (iv) increase in number of youth/women start-ups; (v) increase in number of farmer professional cooperatives that improved their operational standards; (vi) increase in number of households adopting environmentally sustainable and climate resilient practices; (vii) increase in number of households who report reduced water shortages; and (viii) number of policies completed - among other indicators (Ref. Annex I - Logframe). Indicators will be disaggregated by gender, age, and ethnic group, when relevant.
75. **Disbursement-linked indicator:** Since sub-component A.3 professional farmer training program will be developed on concept of Program RBL, so in addition to the key indicators above, project has developed additional three DLIs outcome indicator i.e (DLI-1, incremental number of farmers completing the new professional farmer development training program; DLI-2, Incremental number

of women completing the new professional farmer development training program; and DLI-3, Reduced age of the trainees completing the new professional farmer development training program, in line with the result-based lending approach that will be piloted under this project. These DLIs be used to trigger the disbursement of funds for sub-component A.3.

76. **Expected outcomes:** Expected outcomes include: (i) strengthened inclusive New Economic Entities; (ii) enhanced participation of poor and vulnerable households in rural economic growth; (iii) local economic development enhanced; (iv) increased economic opportunities for women and youth; (iv) enhanced resilience to the negative effects of climate change.

Impact Evaluation

77. **Social Impacts.** Since this project is in context of rural revitalization strategy, most of project's socially derived impacts are expected to be largely positive. The H2RDP strategy calls for the transformation of poor Hunan project areas that will be supported through the project mainly through increasing post-production agricultural activities, introducing and improving value addition efficiencies, provision of off-farm employment, promotion of greater market access and climate smart community smart development infrastructure.
78. All project activities will be supported through forming 'new economic entities' which, in the China revitalization strategy context, are cooperatives, lead/big households, family farms and lead enterprise. Due to development of urban labour markets and male migration many of the beneficiaries remaining in project counties will be female and the elderly and priority will be given to youth and particularly the returnee young investors. At the village level adequate safeguards have been built into project design per PRC IFAD policies to ensure fair distribution benefits among these and other groups including ethnic minorities in the project areas.
79. At the village level major benefits derived from the project would include higher incomes and well-being derived from increased and diversified sustainable production and post-production practices driven by improvements in water management, construction of new and improvements of existing roads, land terracing and land levelling and provision of off-farm employment opportunities and the capture of value-added associated with support for adopting a value chain approach based on one or more selected commodities.
80. At the household/individual level improved health conditions will be achieved through programme support for provision of safe drinking water, safer use of agro-chemicals, reduced exposure to pollution from modernized agro-industries participating in the project, better worker conditions per existing PRC policies and nutrition enhancement.

81. Specifically, the project would assist an expected 410000 primary beneficiaries (individuals) including 50% women, 30% youth and 60% ethnic minorities. In addition to these beneficiaries, the project would benefit 100% of the population in the participating villages as many of the H2RDP's investments in village access roads, drinking water, and other public investments would spread to other non-targeted village members
82. Gender focus is applied in the project design by responding to the needs of women due to their increasing role in household businesses. Women and youth eligible for IFAD start-up funds will have priority. Women led cooperatives and business entities will be given priorities. With improvement of economic empowerment by the project activities, women will be more actively involved in post-production and marketing activities, which will improve their status in the household. Together with their collective participation in cooperative management, women through the project process will increase their capacity to speak out in the community and gradually strengthen their role in the community decision-making. Women's participation in programme activities will be ensured by applying gender-sensitive M&E indicators

Environmental Impacts and Risks.

83. H2RDP Project environmental and social assessments is conducted to identify the potential risks and impacts of a proposed development on the receiving environment in relation to both the bio-physical and socio-economic baseline characteristics. The proposed project is anticipated to generate positive environment and social impacts both direct and indirect by creating the enabling conditions for the ten counties in Hunan, enhancing natural resources management, improving the capacity for soil fertility management.
84. The project goal is to 'increase rural livelihood resilience and inclusive sustainability'. The development objective is to 'Improve livelihood opportunities for vulnerable rural people in the project area, particularly youth and women, and increase their resilience to the impacts of climate change. The project will focus on demand driven public infrastructure and the rural environmental improvement which includes improving climate resilience infrastructure and rural infrastructure (such as irrigation facilities, roads, ditches, cisterns, etc.) in the ten project areas and would not involve any large infrastructure schemes, resettlements, conversion of forest or other environmentally sensitive lands. The project is expected to not only enhance economic and social benefits, but also ecological benefits.
85. However, the project could also generate potential negative environment and social impacts that would need to be avoided, reduced or mitigated consisted with the

national EIA laws and regulations and IFAD's policies. The purpose of the assessment is to identify the key and significant environment and social risks and impacts and recommend feasible and cost effective mitigation measures while enhancing the positive impacts.

86. In this project, the key potential social and environmental impacts includes, 1) the risk of soil and water erosion from sloping field as a result of the expansion of agriculture planting during project implementation; 2) the risk of non-point source pollution from the use of inorganic fertilizers on tea, rice, orange etc., and increase in greenhouse gas (GHG) emissions and increased rates of nitrogen deposition and nitrogen leaching; 3) the risk of damaging the surface micro topography that will affect the soil quality to some extent.
87. The project involves expansion of cropping areas (increase in area of tea, tea-oil tree, lily, rice, green vegetables, fruit, Chinese medicinal materials, etc.), and the planting areas are more than 6,000 ha. In the process of expansion of planting area, the main environmental risk is soil and water erosion.
88. According to the survey, the current area of soil and water erosion has reached 36,100 km² in Hunan province, accounting for 17.3% of the total land area, which indicated that soil and water erosion is a serious environmental problem in the project area. Most of the project areas, located in mountainous areas, are necessary to open up wasteland and slope cultivation during the implementation of the project. Both land reclamation and slope cultivation could damage the soil structure and the land vegetation, thus leading to the risk of soil and water erosion. Furthermore, the agricultural system not only had low energy on conserving water and soil, but also could cause water evaporation, soil erosion, and other environmental risks due to the low coverage in surface in the early stage of planting (such as tea gardens, orchards etc.). Therefore, intercropping with other cash crops such as legumes, grasses, etc. during the early planting stage will be important.
89. The expansion of agricultural planting area increases the use of fertilizer and pesticides and increases the use of pumped irrigation. According to the assessment, the main problem existing in fertilization for agricultural systems in Hunan Province are as follows: 1) the irrational fertilization structure and uncoordinated proportion of nitrogen (N), phosphorus (P) and potassium (K), which showed high application rate of N, and low ratio of P and K. The irrational fertilization structure leads to the decrease of soil quality and crop yield; 2) low dosage of organic fertilizer and backward fertilizing technique. In the project area, with the help of government policies, the application area of organic fertilizer has been increased in recent years, but the area is less than one tenth of the total agricultural area. 3) single variety of organic fertilizer. Dung is the main organic fertilizer resource; 4) lack of knowledge and randomness in fertilization of farmers, lack of necessary technical regulations for fertilization. Farmers seek to increase crop yields without

understanding the adverse effects of excessive use of fertilizers on the soil and the environment. The extensive use of chemical fertilizers leads to a series of environmental problems, such as low fertilizer utilization rate, nitrogen leaching, greenhouse gas emission and agricultural non-point source pollution. The phenomenon, misuse and overuse of pesticides in rice field, is dangerous to human health and damaging to the environment (solid waste materials pollution and soil pollution).

90. Water is indispensable substance for the survival and sustainable development of human beings and all living systems. Water resource is one of the most important strategic resources in Hunan. However, due to high-rate of economic development, increase in population, uneven spatial and temporal distribution of water resources and weak water conservation practices, imbalance between supply and demand of water resources keeps rising, and water pollution is aggravating, which has seriously affected the economic development and people's livelihood in Hunan. Although the project area has abundant rainfall, the allocation of water resource is extremely unbalanced, and the distribution does not match the needs of crops, which can easily lead to drought or flood. Moreover, water is broadly used in agriculture practice (such as tea, orange, vegetables, etc.), but traditional farmland irrigation could waste a lot of water resources.
91. Rice is one of the main crops in China, with an annual planting area of 30 million hectares, accounting for 30% and 40% of country's grain planting area and total grain output, respectively. Agroecosystems play a vital in the global balance of atmospheric greenhouse gases (GHG) and net ecosystem carbon budget (NECB). Estimates of long-term emissions from the agricultural sector suggest that, in order of importance, paddy field is the third largest GHG emission source in the agricultural sector, which accounts for 10% of the GHG emissions in agricultural. The production of CH₄ and N₂O in rice fields is a significant part of global greenhouse gases. In the project, expanding the rice planting area will increase greenhouse gases emission from the farmland ecosystem. Therefore, it is significance to study effective reduction measures of greenhouse gases emission to mitigate global warming effect.
92. The change of soil carbon sequestration is a significant impact on global greenhouse effect. The change of soil carbon storage by changing land use pattern is one of the main reasons for the increase of atmospheric CO₂ concentration. In this project, large-scale changes in the land use will lead to the reduction of soil carbon sequestration potential.
93. Because lacking professional training, farmers and governments are lack of or weak awareness of environmental risks in project areas including climate, soil and water. Poor technical capacity to plan and design environmentally sound and

climate resilient infrastructure. Moreover, lack of understanding of environmental impacts risk in farming activities.

94. Benefited from increased government investment in the past decades, including implementation of the Plan on Poverty Alleviation, local major public infrastructure systems have been largely improved in recent years, especially backbone hydraulic engineering, county and township level drinking water supply systems, and rural roads connecting administrative villages and townships with external networks. However, development of village level public infrastructure systems is still lagging behind, especially, the lack of irrigation engineering for cash crop planted in the hills and mountains.
95. As summarized in Table 1, Average about 57% of village are in lack of connecting roads to production field, and about 39,675 village farmers and 206,915 animals are lack of enough safe drinking water or not reach to standard. There is an urgent need to improve rural roads, and complete water supply systems in these areas in order to meet the demands of agricultural production, poverty reduction and livelihood improvement.
96. Local agricultural production requires both supplementary irrigation. The cultivated land area of the whole province is 62.3 million mu, and the irrigated area is 46.7 million mu, among which the area of sprinkler and micro-irrigated area is only 240,000 mu. Rice and other field crops use traditional surface irrigation. Irrigation water from reservoirs or dams and other water sources. Traditional surface irrigation increases the consumption of water resources¹². At the same time, the excessive application of pesticides and fertilizers has led to the aggravation of agricultural non-point source pollution.
97. Due to underinvestment in the past decades, water storage and delivery systems are limited, especially for cash crops and fruit trees. As summarized in Table 1, only average 61% (25% to 87%) of the cultivated lands are irrigated in the targeted counties, which is much lower than the provincial and national average. The limited existing water storage and irrigation systems are mainly developed several decades ago, facing some common issues in degraded water storage capacity, deteriorated water delivery and control systems, and low system performance. Associated drainage systems are either incomplete or deteriorated. These impose an urgent need in completing and improving irrigation and drainage systems in order to better meet the requirements of agricultural production and agribusiness development.
98. Climate change is future compounding the situation. According to the meteorological monitoring data in the past 50 years, the climate situation has

¹²Implementation Plan for an Additional 1.5 million mu of High-efficiency Water-saving Irrigation Area during the 13th Five-year Plan Period of Hunan Province, Hunan Water Resources Department, 2017

changed significantly. From 1960 to 2010, mean temperature in Hunan province increased at a rate of 0.153°C per 10 year. Temperature increase is more obvious in winter and spring and autumn seasons. Precipitation increased in winter and summer, and decreased in spring and autumn. The unevenness of precipitation increased. Frequency and intensity of extreme weather events increased, which caused more serious seasonal droughts, floods and soil erosion. Meteorological disasters such as floods, droughts, strong winds, high temperatures, heat waves, hail and haze have become more frequent and stronger. In order to enhance climate resilience and effectively respond to these risks, development and improvement of climate-resilient infrastructure system in the project area is crucial to enable road access, improve water security, and prevent soil erosion.

99. Through Component B, the project also aims at improving infrastructure systems in the targeted project area through a combination of physical improvement, institutional strengthening and technical assistance in order to promote sustainable and climate resilient agricultural production.

Table 2.1. Status of Public Infrastructure System in the Project Counties

County (District)	Farmland and irrigation area			Rural Roads		Water Supply	
	Total cultivated land area (ha)	Percentage of slope land (%)	Functional irrigation areas (%)	Village lack of connecting roads to production base (%)	Village lack of connecting roads (%)	Number of population lack of access to safe drinking water (not reach to standard) persons	Number of animal lack of access to safe drinking water (heads)
Changde City							
Taoyuan	96396	15	87	48	3	67	141680
Shimen	48566	31	75	50	70		
Xiang Xi Prefecture							
Guzhang	10450	65	46	43	23	5766	3500

Fenghuang	40640	38	25	66	10	3360	8340
Luxi	22500	17	67	19	13	13435	19360
Longshan	34180	13	63	52	10		6892
Shaoyang City							
Shaodong city	59986	46	36	70	20		
Daxiang	6707	20	80	70	10		
Longhui	73875	52	55	70	40	15247	26143
Chenzhou city							
Rucheng	26852	40	68.5	80	5	1800	100
Total (or average)	420152	34	60	57	20	39675	206915

100. This component will address some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities. Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options - and plan and decide accordingly and improving the climate-resilience of the infrastructure system.

101. The above objective is based on local conditions and needs, and in line with the government strategy on poverty reduction and rural revitalization. It contributes to the overall project development objective of “enhancing the income generating opportunities in the project area, and the inclusiveness of the benefit-sharing mechanisms, through the improvement of the government's existing and the piloting of new delivering mechanisms.”, and is in compliance with the overall goal and strategic objectives of the IFAD COSOP in China (2016-2020).

102. As the major public infrastructure systems in the targeted project areas have been covered by relevant government investments, and specific production and processing infrastructure of agribusiness entities will be included in their respective investment plans under Component A, this Component B will mainly complete the gaps of the village level public infrastructure systems to support the proposed agribusiness development, and also provide public services to local villagers. Especially support demonstration and development of climate proofed irrigation.

103. This Component would support to following activities:

- (i) Improvement and development of climate proofed irrigation systems, including water source structures and pump station and delivery systems, which would provide irrigation water to both agribusiness entities and village farmers, and development of climate proofed irrigation infrastructure, including sprinkler and drip irrigation systems, advanced fertigation system demonstration. The infrastructure will be linked to the needs of the new economic activities supported in component A and cannot be precisely defined at this stage. An estimation of the structures to be supported include rehabilitation and development of 174 km canals, 56 km pressure pipelines, 24 pumping stations, 7,521 head control and system, 108 water pond, 130 water cellar, 305 water pool, 136 culvert, 82 retaining dam, 30 aqueduct, 141 sluice, 83 bridge and 59.9km drainage ditch. These interventions would develop and improve 7219 ha irrigation area distributed 111 village in 60 townships. These interventions would contribute to enhancement of agricultural productivity, agriculture diversification, climate resilience and farmers' income generation. Ownership of the irrigation systems and the water source facilities improved and developed under the project will belong to the beneficiary villages, water users' associations or farmers' cooperatives depending on the decision made by respective county project management offices during the project implementation, based on the size and benefiting scope of the systems. Improved and developed irrigation and drainage systems will be handed over to the identified owners at the completion of construction, who will be responsible for O&M of the systems, with continuous technical and financial supports from government departments and respective irrigation management agencies.
- (ii) Development and improvement of village roads and production roads, which will serve both the agribusiness entities and village farmers. The project would support development of an estimated 192 km village roads, 267 km production roads, 192 km earth roads in 106 villages located in 59 project townships. Ownership of the on-farm roads improved under the project will belong to the beneficiary villages, who will be responsible for O&M of these road systems with continuous technical and financial supports from government transportation department.
- (iii) Improvement and development of safe drinking water supply systems. The project would support development of an estimated 91 km water pipeline and 47 water source engineering (small reservoir). These interventions would enable easy access to safe drinking water for a total of 97,705 rural population and 106543 livestock in the 75 project villages in 38 townships. Ownership of the safe drinking water supply systems improved and developed under the project will belong to respective beneficiary villages, who will be responsible for O&M of these systems with continuous technical and financial supports

from government departments.

- (iv) Land improvement and preparation. The project would support land levelling in order to enable safe and productive farming, soils and water conservation. This activity would support development of an estimated 1527 ha land levelling and 286 ha terracing of cultivated sloping land. These interventions would benefit 35896 rural HHs in 71 project villages in 36 townships. Ownership of the farmland terraced and leveled under the project will follow the existing land tenure arrangements governed by government policies and guidelines. Beneficiary farmers will be responsible for sustainable management and use of land resources under their respective tenure, with continuous technical and financial supports from government transportation department.
- (v) Improvement and extension of power supply systems. The project would support development of an estimated 12 km extension of electricity lines to village farms and agribusiness entities and 5 transformers. These interventions would bring enable electricity supply to irrigation systems, agro-processing plants and rural households in 18 project villages in 11 townships. Ownership of the electricity supply systems improved and developed under the programme will belong to the beneficiary villages, who will be responsible for O&M of these systems, with continuous technical assistances and supervision from local electricity agency.
- (vi) Environmental improvement. The project would support development of an estimated 12.95 km ecological interception ditch, 859 farmland waste recycling pool, 3707 street lamp, 1044 domestic sewage purification pool, 355 public domestic waste collection pool, 120 ecological pond, 53500 m² constructed wetland.
- (vii) Support to infrastructure O&M. The project would support (i) establishment and strengthening of infrastructure O&M organizations, including water users' association and other infrastructure management groups, through construction of office buildings, procurement of furniture and office equipment, provision of technical assistance, and organization of workshops and meetings and training to O&M organizations and beneficiary farmers on O&M of infrastructure systems, systems; and (ii) implementation of normative O&M of infrastructure systems improved and developed under the programme during the programme life time through provision of financial support.

Table 3 Expected Sub-component B Outputs

Social, Environmental and Climate Assessment Procedures
Annex 8. SECAP Review Note (Outline) H2RDP

County (District)	Farmland Area Terraced and Leveled (ha)	Irrigation Area Develope d and Improved (ha)	No of Beneficiaries of Water Supply System		Length of Electricit y Lines Extende d and Improve d (km)	Rural Roads Develop ed and Improve d (km)	Environmental Improvement		O&M of Public Infrastructure	
			Peopl e	Livesto ck			Admi nistra tive Villa ge	Benef iciari es	No. of O&M groups establis hed	No. of peopl e traine d
Changde Prefectu re										
Taoyuan		744	496	356		49	9	1098 5	9	90
Shimen		990				66	5	5384	9	90
Xiang Xi Prefectu re										
Guzhang	533	1217	9824	25686		70			21	276
Fenghuan g		208	5468	25340		23	7	4305	11	55
Luxi		313	326	285		65	15	2543 5	15	200
Longshan		340	1720	1026		40	11	1616 8	11	280
Shaoyan g Prefectu re										
Shaodong	220	700	1000 0	20000		187	18	5096 7	18	460
Daxiang	269	373	2303	5850	6	55	5	1528 9	5	20
Longhui	360	1554	3933 5	23000		61	18	3933 5	18	500
Chenzho u Prefectu re										
Rucheng	500	780	2823 3	5000	6	34	15	2823 3	15	300

Total	1882	7219	9770 5	106543	12	650	103	1961 01	132	2271
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104. These activities will be implemented at selected sites in the project counties in Hunan Province, based on local infrastructure constraints and the project agribusiness development needs. The Provincial Project Management Office (PPMO) will be responsible for overall supervision and coordination. Its subordinate offices at prefecture level will be responsible for direct supervision and coordination of sub-component activities within their respective prefectures. The sub-ordinate offices at county level will be responsible for detailed implementation of sub-component activities within their respective counties.

105. Specific interventions initially identified under this sub-component are subject to further confirmation and adjustments during the project implementation, following the same selection criteria applied during the project preparation: (i) compliance with relevant government policies, plans and guidelines; (ii) contribution to achievement of the programme objectives; (iii) availability and good potential for land and water resources development; (iv) readiness of external major infrastructure systems/networks; (v) willingness of local villages and beneficiaries to take over O&M responsibilities; (vi) technical, economic, social and environmental feasibilities; (vii) incorporation of climate change conditions; and (viii) reasonable scope and cost considering the overall project size.

106. System planning and engineering design of the proposed infrastructure systems will follow the technical guidelines issued by relevant government agencies. Close cooperation will be established with county bureaus of agriculture, water, transport and power, environmental protection agency in order to ensure their compliance with government strategies and policies. Qualified experts will be mobilized for technical assistance and training. Procurement of civil works, goods and services will follow relevant government and IFAD guidelines and processes. Suitable infrastructure management organizations will be identified/established before the commencement of each infrastructure improvement work, sufficiently involved in the whole process of system planning, design and construction supervision, and take over the O&M responsibility after completion of construction.

107. A step-wise participatory process will be adopted for implementation of this sub-component, including: (i) participatory need assessment on infrastructure development based on local development plans on poverty reduction, agriculture production and their requirements on infrastructure services; (ii) identification/establishment and training of infrastructure management organizations; (iii) system planning, engineering survey and design of infrastructure systems; (iv) consultation and finalization of system planning and engineering designs, including discussion and agreement on the O&M responsibilities of infrastructure management organizations; (v) implementation of

construction and supervision; (vi) inspection of construction completion and handing-over of O&M responsibilities to infrastructure management organizations; (vii) implementation of normative O&M by infrastructure management organizations; and (viii) facilitation of women's involvement in each of the above steps.

108. Sustainable and climate-smart approach will be mainstreamed at each phase of the project cycle. During preparation, the impacts of climate change on water availability, water demands, flood and drought frequency and intensity will be assessed and incorporated into system planning. During implementation, suitable adaptation and mitigation options will be incorporated into system design and O&M, including adopting adaptive technical models and engineering design, applying energy-saving technologies and equipment, and supporting capacity building on effective water resources management. During evaluation, climate change related indicator, such as coverage of irrigation service, irrigation efficiency and reliability will be carefully evaluated and reported. Costs for environment protection and soil and water conservation during the implementation of infrastructure interventions have been estimated and budgeted following the requirement of relevant government policies. Environmental-friendly practices will be adopted during construction to avoid and mitigate potential negative impacts, including assessment of environmental impacts before implementation, and protection of trees and vegetation.
109. The project will invest in farmland leveling and water-saving irrigation techniques to enhance natural resource management and reduce erosion through soil and water conservation, thereby increasing crop productivity.

2.2 Climate change and adaptation

110. The climate of 10 counties is generally suitable for agricultural production. To a certain extent, the counties have considered to avoid climate risks when selecting the leading industries and project sites, including crop varieties, logistics conditions, infrastructure, etc. Generally small or slight agrometeorological disasters are common in all regions, but serious disasters are rare. Most of them can be prevented or controlled. The resilience after disasters is also strong, and the degree of climate risk is not high. However, according to the industrial characteristics of each county, there are still some points to be noted.
111. The main agrometeorological disaster in Shimen County is flood caused by heavy rainfall, followed by continuous high temperature drought, which has an impact on crop yield and quality. In winter of 2018, low-temperature freeze damage occurred. The area of Citrus suffering from severe freeze damage is nearly 80%, with a loss of 400 million yuan. However, the frequency of such low-temperature freeze

damage is relatively low, and it is understood that it has not occurred for at least 50 years before.

112. In Taoyuan County, the flood caused by heavy rainfall is the main agrometeorological disaster followed by the continuous high temperature drought, which has an impact on crop yield and quality.

113. The main agrometeorological disasters in Guzhang County are continuous drought and low temperature and overcast rain.

114. The main agrometeorological disaster in Longshan County is hail, but the local weather team and ability are strong, most of the time and regions can take measures to eliminate hail. However, Shipai town, one of the intended project sites, is currently a blind area for hail suppression service, and there is a geological disaster-prone area in this town, which needs to be prevented.

115. In Luxi County, continuous drought and low temperature ice snow weather are the main agrometeorological disasters. In 2003, there was a drought that lasted for several seasons. It snows every year, but the disaster is not strong.

116. The main agrometeorological disaster in Fenghuang County is seasonal drought. In Shaodong city the main agrometeorological disaster is drought, which is usually continuous from July to October, followed by hail.

117. Floods and droughts are the main agrometeorological disasters in Daxiang district of Shaoyang City, which have a greater impact.

118. The main agrometeorological disaster in Longhui county is drought, followed by hail and high temperature after heavy rainfall, and drought in Rucheng County.

119. To sum up, the agrometeorological disaster that has the greatest impact on most project areas is drought, especially continuous drought. It is necessary to focus on taking drought prevention and drought resistance measures, such as building irrigation facilities (reservoir / pond / drip irrigation and spray irrigation facilities, etc.), and promoting the integration of water and fertilizer to reduce the use of artificial and chemical fertilizers. It can protect the environment and mitigate and cope with climate change. It is suggested that agrometeorological monitoring and early warning should be strengthened in order to take preventive measures in advance. In addition, it is also a way to adapt to and cope with climate change to carry out climate risk assessment, train farmers to improve the ability of climate risk information identification and application.

3. Environmental and social category

120. The project is expected to contribute to environmental benefits by addressing the agro-environmental vulnerability of farming household through strengthening capacity for sustainable and integrated farming practices, the value chain improvement and promotion, thus agricultural industry development. The project is expected to build the local brand agro-productivity, enhance manufacture of agro-productive facilities and process on farm-products in a sustainable development way to improve the capacity for soil nutrient management and reduce soil erosion. The project would invest in technologies for carbon sequestration and reduce the GHG emission from agricultural sources, promote the development of high efficiency irrigation and introduce integrated pest and disease management practices. The overall approach of the project would be based on promoting social cohesion by working with farmer groups and help them realize economies of scale.

Rural environmental status and vulnerability

121. On one hand, according to the scale of livestock and poultry breeding, the amount of agricultural fertilizer and the risk of drinking water in the county of the project, the exposure of the main agricultural environmental risk in the county of the project is evaluated. On the other hand, the agricultural environmental risk management is considered to be positively related to the local education level and the per capita net income.

122. The agricultural intensification and natural resource management of the 10 counties in this project were evaluated. Seven index were chosen to evaluate two aspects, agro-environmental risk management ability and exposure. In regard with the risk management ability, we assume if a place with higher educational level and economic income, it is expected to have a higher ability to cope with environmental risk. In this study, Shaodong, Shaoyang, Shimen, Taoyuan with higher education level and GDP, show a higher risk management ability than the other 6 counties (Table 3).

123. On the other hand, according to the scale of livestock and poultry breeding, the application of agricultural fertilizer and the risk of drinking water in the county of the project, the exposure of the main agricultural environmental risk in the county of the project is evaluated. Shaodong, Shaoyang, shimen and Taoyuan show a higher exposure to agricultural environment risk (Table 4).

Table 4 Rural environmental status

Counties	Agro-environmental risk management ability	Exposure
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	Education (#>K12)	Education years	GDP/R MB	Annual income(Yuan)	net Chemical application(kg/mu)	fertilizer no safe ing water	ock # (#/m drink 2)	Livest ock # (#/m drink 2)
/Rucheng	25174	7.63	18565	9990	157.73	0	6.1	
/Fenghuang	27808	9.1	23852	10129	38	0	14.9	
/Guzhang	16893	10.4	17905	7847	30	0	8.4	
龙山	2894	10.1	17069	9412	107	216	9.9	
泸溪/Luxi	3958	10	19872	8360	61.7	62	7.4	
邵东	205840	10.5	40829	18945	57	830	15.0	
邵阳	9461	9	49887	15810	596	46	19.7	
石门	85883	9.9	40643	10561	140	0	24.2	
桃源	170584	6.87	40765	14738	867	4442	14.7	

124. Combined with these two parts, the environmental vulnerability, ratio risk management ability to exposure, of the project counties is evaluated and graded. It can be seen that Longshan, Shaodong, and Taoyuan have high vulnerability grade due to the lower human and financial resources in Longshan to manage environmental and social risk and impacts, while larger amount of chemical fertilizer and livestock numbers per m² in Shaoyang and Taoyuan. One more threat for Taoyuan is without safe drinking water (Table 5).

Table 5 Agro-environmental vulnerability

Counties	Agro-environmental risk management ability	Exposure	Vulnerability	Environmental category
Rucheng	30.06	12.73	42.35	B
Fenghuang	34.40	14.24	41.39	B
Guzhang	29.60	8.45	28.54	B
Longshan	27.86	17.27	61.99	B
Luxi	27.98	10.26	36.66	B
Shaodong	83.17	30.10	36.19	B
Shaoyang	45.97	46.21	100.52	B

Shimen	52.58	26.95	51.26	B
Taoyuan	68.39	133.80	195.64	B

125. The project design will focus on the promotion of inclusive sustainable agriculture development by strengthening farmer cooperatives and farmers training program, the development of small-scale irrigation and farm roads. A preliminary screening of the project interventions has been carried out. The environmental screening has incorporated the requirements of IFAD and Government. In parallel a preliminary screening of the projects in relation to the Government environment regulations has been carried out. Based on a preliminary screening of the project components described above the project is a Category “B”.
126. The project is classified as environment and social Category B. The potential adverse environmental and social risks and impacts will be site-specific, reversible and can be managed by known mitigation measures included in the SECAP Review Note. The project will not involve any large infrastructure schemes, land acquisitions, resettlements, or conversion of forest or other natural or modified habitats. It will not involve any involuntary taking or restriction on the use of land that may result in physical or economic displacement and will not damage or destroy any physical resources of historic, religious or cultural significance.
127. The project activities will be implemented in ten (10) counties. Most of the agricultural development would be located on existing cultivated lands. But activities include reclaiming barren hills into tea orchards in Guzhang County. China's forest laws and soil and water conservation laws will apply in this activity.
128. The project design will promote environmentally sound and sustainable agriculture, and invest in rehabilitation and some new irrigation development with a high emphasis on sustainable water use efficiency and strong water management. Some increased use of pesticides is envisaged however these will be supported by applying integrated pest management guidelines and training in the safe and environmentally sound practices for pesticide use, waste from agriculture and processing will be small scale and will include measures to ensure safe disposal, and where viable include recycling.
129. Special attention will be paid to Chinese EIA laws and regulations and IFAD’s SECAP requirements during project planning and engineering design, to avoid and/or mitigate any major negative environment impacts. Specifically, the following interventions would be excluded: (i) large-scale dam/reservoir construction, with more than 15-metre high wall, more than 500-metre long crest, and/or with a reservoir exceeding 3 million m³ capacity or incoming flood of more than 2,000 m³/s; (ii) rehabilitation or development of large-scale irrigation schemes, with command area above 100 ha; (iii) construction of rural roads that entail the total area being cleared above 10 km long, or any farmer with more than

10 % of his/her private land taken; (iv) drainage or correction of natural water bodies (e.g. river training); and (v) significant extraction or diversion/containment of surface water leaving the river flow below 20 per cent environmental flow plus downstream user requirements.

130. The project does not involve large-scale irrigation schemes rehabilitation and/or development. The irrigation area of 7,219 hectares of this project will be improved and developed. The irrigation projects constructed are distributed in different plots in 111 villages of 60 towns, and per scheme less than 100 hectares.

131. The sources of water for irrigation and drinking water projects include built reservoirs, rivers, streams and springs, and collected rainwater. The Water Bureau will conduct safety appraisal (safety assessment) of dams and buildings of the water sources engineering according to the technical standards (measures for safety appraisal of reservoirs and dams, Ministry of water resources, June 2003). Dangerous buildings will be avoided to use in this project. All water sources are surface water and no underground water will be used. The volume of reservoir or water cellar to be built in the project is between 4m³ and 400m³. The highest dam height of 52 dams to be built in Longshan County is less than 5m. For the pump stations, water intake flow from river is less than 100 m³ /h, but the flow of the rivers in the dry season are more than 3,600 m³ /h. According to Water Bureau Board, the water intake flow is far less than the river flow, which will not affect the downstream water and ecological water.

132. Each project county has carried out water resource balance analysis for the project area through water bureau board. The implementation of the project will reduce the total water consumption or newly increased water consumption of the project county will be within the allowable bearing capacity of water resources. All water source of the project will be within the government plan and will be approved by the government. The water consumption of the project will be within the scope allowed by the government. The project will not cause or damage the water balance in the project area.

133. The infrastructure will entail some conversion of farmland, where all farmers impacted will lose less than 10% of the land they have user rights to through voluntary agreements. The increased production, can potentially increase pollution from pesticides and increase pressure on land resources against which farmers will be trained in IPM and soil fertility management. All these possible impacts are reversible in nature, and can be readily remedied by appropriate preventive actions and/or mitigation measures as outlined in the ESMP. The farmer-cooperative-enterprise models for rural transformation has risks of elite capture and limited economic inclusion and benefits generated for poor and vulnerable households, women and youth. It is at the core of the design to support a pro-poor and inclusive

development and implementation of these models and monitor the results (ref. component A).

134. Some of the activities that have been preliminarily identified in the project that may have some impact on environment include construction or rehabilitation of rural roads in “non-sensitive areas”, small-scale irrigation works, agricultural intensification and expansion of cropping area in “non-sensitive areas”, livestock development, water conservation measures. The project would adopt beyond the "cause no harm" safeguard principles, but expected to bring positive impacts social and environmental. The Project design mission confirmed that no infrastructure would trigger IFAD's "Category A" classification.

135. The Design Mission confirmed proposed activities do not see any resettlements required. According to IFAD policies, any economic or physical displacement caused by the project require additional assessments and application of specialized tools to mitigate potential adverse social impacts such as a Resettlement Action Plan (RAP) agreed through participatory processes and applying the principle of Free, Prior and Informed Consent (FPIC).

4. Climate risk category

136. Risk is defined as the potential for consequences where something of value is at stake and where the outcome is uncertain, recognizing the diversity of values. It is often represented as probability of occurrence of hazardous events or trends multiplied by the impacts if these events or trends occur, which is shown as the interaction of hazard and vulnerability. Hazard evaluation and vulnerability evaluation are the important parts of risk assessment.

137.

138. In this report, the hazards of drought, flood, high temperature and low temperature events from 2021 to 2050 under RCP 8.5 scenario are evaluated. The vulnerabilities of counties in Hunan province are also evaluated, which include the basic factors of population, economy, agriculture, income, infrastructure, education and so on. Based on the classifications of hazard evaluation and vulnerability evaluation, risk assessment model is established according to the principle of risk proposed by United Nations.

$$R (risk)=H(Hazard)\times V(vulnerability)$$

139. Where, R is risk index of climate extreme events in the future; H is hazard index of climate extreme events under RCPs scenarios; V is vulnerability index of countries in Hunan province. The intervals used for defining the values of the different classes of hazard, vulnerability and risk are shown in Table 6.

140.

Table 6 Values used to define the different classes of hazard, vulnerability and risk

	Hazards		
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Values of	Drought(D)/day	Flood(F)/mm	High temperature(Ht)/day	Low temperature(Lt)	Vulnerability(V)	Risk(R)
Low	$D < 30$	$F < 100$	$Ht < 15$	$Lt < 10$	$V < 30$	$R < 10$
Moderate	$30 \leq D < 50$	$100 \leq F < 150$	$15 \leq Ht < 30$	$10 \leq Lt < 20$	$30 \leq V < 100$	$10 \leq R < 18$
High	$D \geq 50$	$F \geq 150$	$Ht \geq 30$	$Lt \geq 20$	$V \geq 100$	$R \geq 18$

141. The climate risk is classified into 3 levels, including high level, moderate level and low level. For high level of climate risk, it is defined that the county experiences frequent and intense climate extreme events, and the possibility of economic loss is the biggest. For moderate level of climate risk, it is defined that the scale and frequency of climate extreme events faced by the county are moderate. For low level of climate risk, it is defined that climate extreme events faced by the county are less than moderate, which lead to the least possibility of loss among the counties.

142. According to the assessment results, climate risks of 10 counties are classified into 3 levels, including high risk, moderate risk and low risk. The distributions of climate risks under RCP 8.5 scenario from 2021 to 2050 in Hunan are shown in Fig.1, which reveals the future challenges faced with drought, flood, high temperature and low temperature events under climate change. Comparing the risks in different counties, the high risk area is concentrated on several regions, including Fenghuang and Shimen. Besides, Longshan, Longhui, Luxi, Shaodong, Taoyuan and Rucheng are under moderate risk; the climate risk is low in Shaoyang and Guzhang counties.

143. In the next 30 years, Fenghuang would be faced with moderate hazards of low temperature and high temperature events, high hazard of flood and low hazard of drought. Otherwise, the exposure and sensitivity in Fenghuang are very high, but the adaptation capacity is low, so the vulnerability of Fenghuang County is the biggest among the 10 counties. Therefore, the integrated climate risk in Fenghuang would be the highest.

144. Shimen would be threatened by high hazard of flood and low temperature events, moderate hazard of high temperature events and low hazard of drought in the future; the exposure in Shimen is high, the sensitivity is moderate, and the adaptation capacity is in the moderate level; so, the vulnerability of Shimen country is high which is lower than Fenghuang. Finally the integrated climate risk in Shimen would be in the high level.

145. Luxi would be faced with high hazard of flood, low hazard of drought and low temperature events, moderate hazard of high temperature events, high hazard of flood; the exposure and adaptation capacity in Luxi are in moderate level, the sensitivity in Luxi is the highest of all 10 counties. The vulnerability of Luxi country is in moderate level; finally, the integrated climate risk in Luxi would be in moderate level.

146. Rucheng would be faced with moderate hazard of drought and high temperature events, high hazard of flood, low hazard of low temperature events; the exposure, sensitivity and adaptation capacity are all in the moderate level. The vulnerability of Rucheng country is in moderate level; the integrated climate risk in Rucheng would be in moderate level.
147. Longhui would be threatened by moderate hazard of flood and high temperature events in the future, high hazard of low temperature events, low hazard of drought; the exposure, sensitivity and adaptation capacity in Longhui are in moderate level; so, the vulnerability of Longhui country is in moderate level; the integrated climate risk in Longhui would be in moderate level.
148. Longshan would be faced with low hazard of drought and high temperature events, high hazard of flood, low hazard of low temperature events; the exposure, sensitivity and adaptation capacity are in moderate level; so, the vulnerability of Longshan country is in moderate level; therefore, the integrated climate risk in Longshan would be in moderate level.
149. Shaodong would be faced with high hazard of flood and high temperature events, moderate hazard of drought and low temperature events; the exposure and adaptation capacity in Shaodong are in high level, the sensitivity is the lowest in 10 counties; so the vulnerability of Shaodong country is in low level; therefore, the integrated climate risk in Shaodong would be in moderate level.
150. Taoyuan would be faced with high hazard of flood and high temperature events, moderate hazard of drought and low temperature events; the exposure and adaptation capacity in Taoyuan are in high level, the sensitivity is very low; so the vulnerability of Taoyuan country is in low level; therefore, the integrated climate risk in Taoyuan would be in moderate level.
151. Shaoyang would be faced with high hazard of high temperature events, moderate hazard of drought, flood and low temperature events; the exposure in Shaoyang is the lowest in 10 counties, the sensitivity is in moderate level, the adaptation capacity is the highest in 10 counties; so the vulnerability of Shaoyang country is the lowest; therefore, the integrated climate risk in Shaoyang would be in low level.
152. Guzhang would be faced with high hazard of flood, moderate hazard of high temperature events, low hazard of drought and low temperature events; the exposure in Guzhang is very low, the sensitivity and adaptation capacity are in moderate level; so the vulnerability of Taoyuan country is in low level; therefore, the integrated climate risk in Guzhang would be in low level.

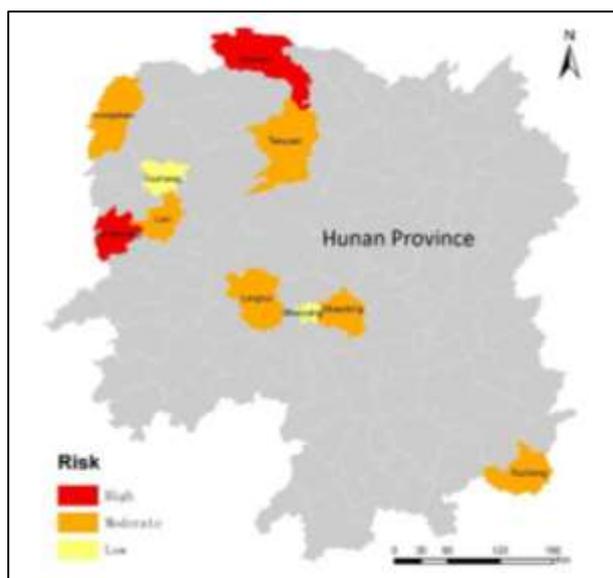


Fig.4.1 Risk distribution of climate change in 10 counties of Hunan province

5. Recommended features of project design and implementation

5.1 Environment and social mitigation measures

153. The activities under the project may have potential risks to the environment. The increased production with inadequate practices may increase soil erosion, pollution from agrochemicals and waste from processing activities. Improvement or new development of irrigation schemes may impact on water ecological systems from overuse of the water source to the downstream areas. Furthermore the project, if not carefully managed, may trigger conversion of forest land to reservoirs and pumping stations. Therefore proper planning and mapping of infrastructure development are very essential. Moreover the project should closely monitor the potential environment impacts of the project during the implementation.

154. Major risks to infrastructure improvement activities under the project include inappropriate O&M of infrastructure systems resulted from inadequate institutional capacity; damage of infrastructure systems due to floods, landslides or soil erosion; and inefficient use of irrigation water due to inappropriate irrigation practices. The project designed activities on: incorporating climate change considerations into infrastructure improvement to enhance the resilience to nature disasters and climate change impacts; identification/establishment and strengthening of infrastructure management organizations to enhance institutional capacity in infrastructure O&M; and technical training to disseminate water-saving irrigation technologies.

155. Promote efficiently and environmentally management systems of fertilizers and pesticides. Long-term practice showed that application of organic fertilizer could reduce soil acidification rate, improve soil physical and chemical properties, and soil fertility. Furthermore, the way of fertilization practices also affects soil fertility (such as sows, furrows, furrows covered with film mulching, integration of water and fertilizer, etc.). Some suggestions were proposed, which are as follows: it should revise the fertilization structure, reasonably control the nitrogen fertilizer rate and increase fertilizer rate of P and K and organic fertilizer based on the soil testing, popularize the technology of applying combination of organic fertilizer and inorganic fertilizer, strengthen monitoring of fertilizer in soil, develop reasonable technical regulations for fertilization as soon as possible, etc. Integrated soil-crop system management cultivation patterns with decreasing the nitrogen rate could increase the crop yield and nitrogen use efficiency, and decrease the net global warming potential and the greenhouse gas intensity.
156. The integration of irrigation and fertilization is an important part of fine agriculture. The technology could promote water efficient irrigation and water management. The experimental data of the demonstration site showed that the integrated technology of water and fertilizer can save more than 50% water, more than 30% fertilizer, and reduce 90% labor when compared with the traditional practice. Due to the precise control of the fertilization time and quantity, the fertilizer will not be leach and loss, then the environmental pollution will be reduced.
157. Some field managements, such as modifying tillage permutations and irrigation patterns, managing organic and fertilizer inputs, selecting suitable cultivar, application of biochar and cropping regime, etc. can reduce greenhouse gases emission and mitigate GHG.
158. During the construction of the project especially infrastructure construction, there will be moderate adverse impacts on the air, surface water and environment in the project areas, but these adverse effects are short-term and reversible. During the construction process, a series of protective measures can be taken to minimize these adverse effects. Measures to mitigate other potential risks during the construction also shall be included particularly in addressing health and safety risks of the constructions workers, surrounding communities and the environment.
159. Improve capacities for waste management. Agricultural waste and the residues and “run-off” of pesticides and fertilizer are common sources of agricultural pollution. In recent years, the utilization of agricultural waste resources is entering a new scientific stage. At present, the resource utilization technology of plant fiber waste mainly includes returning to the field, processing feed, solidification and carbonization, gasification, manufacturing chemicals, etc.. The resource utilization technology of animal manure mainly includes fertilizer technology, feed technology and fuel technology, etc.

160. Improve environmental risk awareness. Strengthen the assessment on potential risk of climate and natural disaster events and apply these to the business models. Capacity development on technical knowledge of potential environmental and climate risks and impacts in agriculture for government and farmers.
161. The activities under the project may have potential risks to the environment. The increased production with inadequate practices may increase soil erosion, pollution from agrochemicals and waste from processing activities. Improvement or new development of irrigation schemes may impact on water ecological systems from overuse of the water source to the downstream areas. Furthermore, the project, if not carefully managed, may trigger conversion of forest land to reservoirs and pumping stations. Inappropriate O&M of infrastructure systems resulted from inadequate institutional capacity; damage of infrastructure systems due to floods, landslides or soil erosion; and inefficient use of irrigation water due to inappropriate irrigation practices. Therefore, proper planning and mapping of infrastructure development are very essential. Moreover, the project should closely monitor the potential environment impacts of the project during the implementation. The project designed activities on: incorporating climate change considerations into infrastructure improvement to enhance the resilience to nature disasters and climate change impacts; identification/establishment and strengthening of infrastructure management organizations to enhance institutional capacity in infrastructure O&M; and technical training to disseminate water-saving irrigation technologies.
162. Assessment on the lesson learned on differentiated approaches to promote social inclusion shall take into account the local context and be done at the early stage of project implementation. This includes identification of specialized organizations that are available on the ground to facilitate the process.

5.2 Climate change adaptation and mitigation

163. The global climate has changed relative to the pre-industrial period, and there are multiple lines of evidence that these changes have had impacts on organisms and ecosystems, as well as on human systems and well-being. Human activities are estimated to have caused approximately 1.0°C of global warming, is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate. It is necessary to take adaptation and mitigation measures which could increase climate resilience and decrease the negative impacts in climate vulnerable areas. For agricultural and rural development, it is urgently needed to develop adaptation plans and policies and to integrate climate change considerations into broader development plans. In recent years, adaptation is being facilitated in some areas through mainstreaming climate adaptation action into subnational development

planning, early warning systems, integrated water resources management, agroforestry, and coastal reforestation of mangroves.

164. The project has been designed to provide a strong foundation for climate change adaptation. Responding to climate-related risks involves decision-making in a changing world, with continuing uncertainty about the severity and timing of climate-change impacts and with limits to the effectiveness of adaptation; integrating climate-risk assessment, planning and decision-making is a long-term strategy for climate change adaptation; innovating new pathways, technologies, measures or systems to promote the climate resilience of vulnerable subjects; training the farmer, cooperatives, government institutions to strengthen the skills and capacities of climate change adaptation; upscaling the project initiatives and experience to wider areas.

165. An in-depth climate risk analysis has been conducted as part the SECAP review. It is critical to provide improved productivity and financial returns in parallel with strengthening the institutional base and laying foundations for climate change adaptation. The climate adaptation plan has also been incorporated in the project design that includes:

- (a) Consider the related impacts of climate change, especially the planting structure adjustment to the associated agricultural production designing or planning, such as the designing of high-technology development region, new technology demonstration region, agricultural development region etc. With the existing and possible climate change, the corresponding climatic resource condition (e.g. temperature and precipitation at both rainfall and the mode aspects) for various crops would be varied undoubtedly. For project area, the planting structure adjustment is mainly driven by economic interests. It is important for the counties to develop risk assessment of climate change with the planting structure changing. Without considering the possible change of planting structure, it is hard for some other technologies to get their possible effect due to unexpected impediment under climate change condition. For the possible planting structure change, the government departments or project designers should consult the relevant research institutes or universities who do the associated studies or analysis in the given area to ensure the possible effect of some technologies. Government should encourage the research institutes to announce their planting structure adjustment suggestions and provide the subsidiary to appropriate farmers who adopt the plans in the forms of seeds, fertilizers, purchasing harvest products.
- (b) Adopt various new coping technologies to decrease the risks in agricultural production. Various new agricultural technologies could decrease the risks in agricultural production under climate change. These technologies include but not only limited to the following aspects: i) new high-yield cultivars of

crops/fruits/vegetables with sound anti-adversity ability such as choosing anti-drought cultivars at high-drought risk area, planting waterlogging resistance cultivars at flood-prone areas during rainy season, selecting the low-temperature resistance varieties at the region prone to low temperature. For example, the citrus planting is important in Shimen, Taoyuan and Luxi counties which occupies a large proportion in agriculture. With climate change, risk of flood and rainstorm would become more serious. The waterlogging resistance cultivars of citrus and the planting technologies of anti-waterlogging should be reserved and spread in these counties.

- (c) Enforce the agricultural infrastructure construction to enhance the coping/adaptation ability of agriculture production under climate change. For example, the agrometeorological disaster that has the greatest impact on most project areas is drought in the past decades which would decrease in the future with climate change. The risk of rainstorm and cyclone hazard would go up quickly in most counties. So it is very critical for the ten counties to develop agricultural infrastructure construction in recent years. Thorough irrigation and drainage systems: sound irrigation system includes the thorough coverage irrigation and drainage system, sound irrigation facility with less water loss during water convey process such as anti-permeable irrigation canals, various irrigation water resources from rivers depending on the local irrigation water conditions. Thorough road net connecting various crops fields, complete electricity supply to the fields etc. Enough post-harvest storehouse and cold chain for fresh product (such as for fruits and vegetable crops). The agricultural infrastructure investment should be strengthened in the area with low adaption capacity and high vulnerability. Meanwhile, the ground water should be protected; the agricultural infrastructure investment should be controlled in small scale and limited on land use changing to avoid the negative environmental impacts. As the project will be promoting climate smart infrastructures that cover a broad range of climate related issues and extreme events, it should look at the risk and adaptability in overall cycle of infrastructure development including in their designs, constructions, as well as operations and maintenance.
- (d) Appropriate decentralization and diversification for crops in a given administration area to disperse the possible risks derived from climate change. Dispersion of crops in either administration area or geographical regions could

disperse the risks from specific disastrous weather when the basic agricultural infrastructure is not sound. Dispersion planting in crop types or in geographical could avoid the risk of severe disastrous weather at specific time such as some extreme events on a given crop, for example, five-day continuous extreme high temperature at flowering period for maize could decrease the yield significantly. It is important to reduce the risk from extreme weather events for some high-value crops to plant under given degree of dispersion at different areas especially at those area where adaptation ability are not thorough. For example, the high temperature disaster would become more serious in Shaoyang and Fenghuang counties. It is a good choice to avoid the risk of high temperature through adjusting the transplanting date of tobacco.

- (e) Strengthen the climate change capacity building to increase the awareness of local farmers on adapting to climate change. In order to promote the awareness of farmers on preventing and decreasing the disasters from climate change, government could hold various activities to enhance the consciousness of climate change for farmers, the direct participants in the agricultural production. For example, hand out related brochures on climate change on International Meteorological Day each year to local farmers to enhance their understandings of climate change. Related local department could organize public training classes quarterly, in which some experts could be invited to give lectures about the specific challenges in different counties. And related departments could also invite some experienced experts to the field to answer the questions from farmers to help them resolve the specific inquiry derive from production process. With the thorough equipped agricultural subjects (local farmers), relevant coping strategies could be carried out effectively.
- (f) Build the climate risk assessment and adaptation technologies decision support system and publish the suggestions periodical especially before the extreme events happen. A thorough decision support system for climate adaptation should include the timely climate information and the consequent analysis modules and associated decision modules. An entire timely chain service built together with the meteorological warning system is critical to adopt the coping actions when disastrous weather is forecasted. The entire chain includes i) the timely climate forecast, ii) the appropriate modularization analysis integrating the weather, crop growing, agricultural infrastructure information; iii) the decision module with adaptation or coping suggestions. And a sound decision support system should be in a sharing network to assure the timely access to information and synchronized analysis which will reach the appropriate sectors (e.g. agricultural technologies extension service center) or final users (e.g. agricultural cooperative society, farmers) for timely action announcement

or adoption. Relevant department could develop associated cell-phone App program for downloading by farmers to improve the coping ability on disastrous weather and extreme climate events.

- (g) Strengthen the construction of meteorological disaster warning system, especially at the information and modularization aspects, so that the pertinent information and technologies could reach the application users coping with the disastrous weather and extreme climate events. It is an obvious trend to apply digitization, information and intelligence technologies on disaster warning, prevention and mitigation. Under the thorough meteorological warning system, information of the disastrous weather can reach the associated application sectors or users in time. Then the analysis modules could be triggered and provide the associated coping measures to the application sectors or users in the meanwhile. The associate analysis modules in the warning system should include the pertinent analysis such as the agricultural production information e.g. the agricultural infrastructure especially the irrigation and drainage facility, regional planning of crop planting, the coping ability of farmers in economic aspect, and thus the associated analysis results and suggestions to the application sector would be gained. Based the sound warning system and module analysis, final users could get the technical supports and pertinent coping measures.
- (h) Encourage the involvement of insurance companies in the agricultural production focusing on the disastrous weather aspects caused by climate change to reduce the farmers' risk derived from climate change. Government should encourage insurance companies to participant in the trial projects to develop the new insurance types and try the new participant way by both insurance companies and farmers. Local government could encourage the insurance companies in the form of subsidiary or tax reduction or exempt to ensure the sound development of insurance involvement in agricultural production. For example, the cash crops (citrus, tobacco, tea) in project area are very important for local farmers which would be affected seriously by the extreme climate events in the future. It is urgent to design proper insurance products for different disasters and crops in project area. As for the specific insurance operation, insurance companies could refer to the experiences got from foreign insurance industries, such as developing the open and self-selected insurance platforms to let the farmers know their cost and possible compensation especially for the high-investment crop production. Government and insurance companies could cooperate with research institutes

to design the possible insurance types according to the existing and possible future trends of climate change such as based on the study of agro-meteorological index. The insurance types could include those based on crop types (e.g. rice, orange, vegetable and so on) or event types (e.g. lower-temperature disaster, higher-temperature disaster, drought disaster, or flooding disaster and so on). Insurance companies could choose the agricultural cooperative societies who have the economic capability and are easier in accepting the new concepts to do the insurance trials.

5.3 Incentives for good practices

166. Allowance and price insurance are two incentive measures as tangible benefits for relinquishing unsustainable practices (farming, processing, etc.), reducing risk, and helping smallholders adopt adaptation and mitigation measure.
167. Allowance is a direct incentive for smallholders to change their behaviours and take measures to tackle climate change issues, such as protecting ecological environment, reducing chemical fertilizer and pesticides, applying renewable energy in farming or processing.
168. Price insurance is an indirect incentive for smallholders. If price insurance of agricultural products is spread, the benefit of smallholders would be guaranteed, which could avoid the loss due to the fluctuation of market. Price insurance could be provided by local government for free. But if smallholders accept price insurance, they should also achieve the standards made by local government, such as relinquishing unsustainable practices, adopting adaptation and mitigation measures.

5.4 Participatory processes

169. The aim of participatory process is to involve in a multi-stakeholder risk analysis and planning process designed to help staff and partner organisations engage with communities in contexts where natural disasters are significant drivers of poverty and suffering. The participatory nature of the process supports men and women to act as agents of their own development who, with the right resources and support, can solve their own problems. It promotes the participation of women in particular as risk analysis and decision-makers when it comes to prioritising what a community can do to reduce its disaster risk.
170. Carry out a participatory capacity and vulnerability assessment should be regarded as an investment with communities that needs to be repeated regularly to help assess progress and enable them to make any changes needed to strengthen the impact different stakeholders' actions. It is important for us to be clear to ourselves and the stakeholders we engage in PCVA that a third-party role as a broker of the

process is distinct from any direct support it might provide in response to the findings the PCVA produces (such as in Livelihoods, WASH etc).

171. A step-by-step guide can be applied to take you through the PCVA process. It is aimed at development practitioners working with communities that are vulnerable to natural hazards. In order to better understanding disaster risk reduction and climate change, which includes not only the impacts and adaptation of climate change, but also the synergies between disaster risk reduction and climate change, the challenges of incorporating climate change into PCVA as well.

6. Analysis of alternatives

172. The objects of the project are to reduce the adverse impacts of environment and climate change and increase the farmer's income. Through knowledge sharing, such as farmers' schools and trainings, can improve farmers' awareness of the environment and climate change, and increase their initiative consciousness of disaster prevention and mitigation, and obtain advanced agricultural development model. In high climate risk counties such as Fenghuang and Shimen, it is suggested to do detailed and deep case study on Climate Risk Assessment and Digital Climate smart Agriculture Development.

171.7. Institutional analysis on the environmental policies and decision-making chain of command to also include other sectors (e.g. health, gender ministries) that are key actors in environmental and social management has been conducted. It helps to identify needs for a gap analysis in case of SECAP requirements against co-financiers, as necessary. The project design also assessed borrower capacity to build resilience to climate change as well as identify roles and who would be responsible for the various activities.

172. At the national level, the National Development and Reform Committee (NDRC), the Ministries of Water Resources (MOWR), the Ministry of Transport (MOT) and the State Council Leading Group Office of Poverty Alleviation and Development (SCLGOPAD) is responsible for overall social-economic development planning, irrigation and water resources management, rural roads and poverty reduction respectively. They provide respective policy advice, technical guidance and programme supports to provincial and local governments and relevant institutions.

173. At the provincial level, the Provincial Development and Reform Committee (PDRC), Department of Water Resources (DOWR), Department of Agricultural and Rural, the Department of Transport (DOT) and the Provincial Government Lead Group Office of Poverty Alleviation and Development (PGLGOPAD) are the line agencies respectively. They issue provincial sector development

strategies, policies, plans and technical guidelines; formulate and implement work and budget plans for provincial government funded programmes and projects.

174. At the prefecture and county levels, the counterpart agencies are the Bureau of Development and Reform (BODR), the Bureau of Water Resources (BOWR), the Bureau of Transport (BOT) and the County Government Leading Group Office of Poverty Alleviation and Development (CGLGOPAD) respectively. They formulate and implement prefecture and county level sector development plans and projects, review and approve system planning and project designs for relevant investment activities, supervise their implementation, and advice system operation and management.
175. Various research, education and consultancy institutions at different levels in the area of irrigation, water resources management, agriculture, as well as transport are responsible for providing relevant technical services and capacity building. Water Management Stations and Agricultural Extensions Stations at township level are responsible for water and agriculture services and technical extension at field level. Public and private contractors are contracted for infrastructure construction and technical services following government procurement guidelines. Township Authorities and Village Committees are involved in project identification and planning, mobilization of beneficiary contributions. Village committees, water users' associations, and farmers' cooperatives are responsible for operation and maintenance of village level public infrastructure systems.

6.1 Capacity- building

176. The Project would have a strong focus on building of capacity for the implementation at county and community levels. Capacity building/training would be provided to all key institutional participants and the principal stakeholders in order that the project is properly understood and the different parties are able to implement their assigned responsibilities. Key information and outreach materials would be produced according to the specific audience being addressed (e.g., government, cooperatives/private sector, community, smallholders).
177. The project would identify community and other stakeholder capacity-building needs, supported by effective information, education and communication activities. This include the needs for specific trainings such as natural resource management and/or climate-related issues, supervision and reporting needs, including measures (i.e. environmental approvals, local permits, compliance with

specific international guidelines and standards, compensation, grievance mechanisms, etc.).

6.2 Additional funding

178. During the implementation, the project may also explore the opportunities for linking the investment with multilateral or bilateral environmental and climate financing sources (i.e. Global Environment Facility, Green Climate Fund, Adaptation for Smallholder Agriculture Programme) for enhanced results and impact. Other complementary investment projects may also become potential co-financiers to increase the multiplier effects of the project impacts to the beneficiaries in the long run

7. Monitoring and evaluation (M&E)

179. M&E plan should be developed as per the project logical framework. The log frame will be used to chart progress against activities, outputs and outcomes, using SMART key performance indicators. Establishment of baselines from which to measure progress will be undertaken in the period of project initiation. The project shall also explore the initial use of spatial coordinates in M&E and be an integral part of procurement of civil works, goods and services. The nominated Project Officer and Research Council contact, as an invited representative on the Group, will be party to M&E plans/activities and discussions relating to project progress.

180. The log frame would set out the indicators and their means of verification for outputs and impacts. They could combine traditional process indicators and approaches to measuring research capacity, with indicators derived from the capacity development assessment tool. Impact indicators – these will be measured in terms of changes in planning within project study area and the ability of the project team and its scientific work to influence these decisions, and will be more fully developed during the inception period.

181. The outcomes of project relate to different aspects of developed capacity, and evaluation of their achievement will be supported by the capacity development assessment tool (CDAT). The use of this score-card based tool will involve measuring the baseline (start-of-project) and end-of-project capacity at the scales of individuals, organizations and networks, scoring against a set of elements under each of three capacity spheres: competencies, resources and enabling environment. The baseline assessment will help with the prioritization of capacity building needs.

8. Budgetary resources and schedule

Technical Implementation Scheme and Budget for Climate change Adaptation and Mitigation Services in Hunan

182.i. Identifying climate risks and vulnerable areas of agricultural industry

Technical Implementation Scheme

In view of the main agricultural industries selected by each county, select and determine its main agrometeorological disasters, establish disaster risk indicators, build a disaster risk scoring system, analyze the characteristics and temporal and spatial distribution laws of the main agrometeorological disasters in history and future, identify the high, middle and low areas of the climate risk of the agricultural industry in each county and assess their vulnerability.

Budget US\$ 10,000 for each county

183.ii. Agrometeorological dynamic monitoring system and management platform

Technical Implementation Scheme

Select representative monitoring points with industrial development characteristics, deploy and install 2-3 sets of agricultural meteorological monitoring equipment based on the Internet of things, implement long-term positioning dynamic observation of farmland meteorological environment, form an agricultural meteorological monitoring system with data real-time transmission function, realize real-time return of key agricultural production information and revise the result data, establish and form an industrial development system Agricultural meteorological data monitoring database with special features

Budget US\$ 20,000 for each county

184.iii. Early-warning system for climate related disasters on agriculture

Technical Implementation Scheme

Based on the meteorological dynamic monitoring data, weather forecast data of meteorological departments and extreme climate data, through applying the large data analysis method of multi-source data fusion, the characteristics of climate disasters would be analyzed, including spatial and temporal distribution law; the agricultural impacts and losses of dominant agricultural products would be evaluated, which are planted in ten counties of Hunan Province under the influence of climate change. The diagnostic index and model of main meteorological disasters in agriculture of Hunan Province could be established; the disaster monitoring and early warning service system would be constructed in representative agricultural production areas of Hunan Province; it would provide disaster early warning, disaster prevention and mitigation information service for local agricultural management departments, agricultural management collectives and farmers in combination with the main agricultural industries in the region.

Budget US\$ 20,000 for each county

185.iv. Digital management of industry in response to climate change

Technical Implementation Scheme

Take the cooperative participating in the demonstration as the object, build a high-quality agricultural product climate resource efficient utilization management platform, develop a digital and intelligent farmland technology management system, put forward suggestions for farmland irrigation and fertilization, simulate the dynamic changes of output and quality in different climate years, and provide suggestions for planting / harvesting and sales strategies for the demonstration project.

Budget US\$ 20,000 for each county

186. Farmer training to improve the adaptability to climate change

Carry out a series of training for local agricultural management departments, agricultural operation collectives and farmers to improve their ability to obtain, identify and apply climate risk information

Budget US\$ 10,000 for each county

Attachment 1:

Check List and Preliminary Screening for Environmental and Social Categories and Climate Change

IFAD classifies all projects into one of three environmental and social categories (A, B or C) and one of three climate risk classifications (high, moderate and low). Where IFAD is jointly financing a project with other agencies, IFAD will cooperate with the partner agency and agree on a common approach for the assessment and the categorization of the project.

Determination of the category and classification will also depend on the national requirements and the existing national capacity to promote and implement environmental and social mitigation measures. The determination is informed by existing assessments of national frameworks and capacities.

A positive response to any question between 1 and 23 will categorize the project as A. Similarly, a positive response to question 24 to 40 will categorize the project as B. In case all answers are negative, the project will be categorized as C.

This list of questions can be used at different stages of the project design and should be used in conjunction with the respective guidance statements.

The checklists for environmental and social and climate risks will:

1. initially be filled in during concept development to help guide in the identification of opportunities and possible risks and activities that will need to be considered in the project design;
2. be attached to the SECAP review note; and
3. be reviewed during project design phases and updated as required.

Project title:	Hunan Rural Revitalization Demonstration Project (H2RDP)		
IFAD project no.:		Version of checklist:	Version 1
Country:	China	Date of this version:	05/18/2020
Checklist prepared by (name, title and institution)	CAAS - IFAD Consultant		

Attachment 2: Guiding questions for environment, social and climate risk screening

Province Name : Hunan

Guiding questions for environment and social screening	Yes/no	Comments/explanation
Category A –the following may have significant and often irreversible or not readily remedied adverse environmental and/or social implications.		
Project location		
1. Would the project develop any wetlands?	No	
2. Would the project cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. conversion of more than 50 hectares of natural forest, loss of habitat, erosion/other form of land degradation, fragmentation and hydrological	No	
3. Does the proposed project target area include ecologically sensitive areas ¹³ , areas of global/national significance for biodiversity conservation, and/or biodiversity-rich areas and habitats depended on by	No	
4. Is the project location subjected to major destruction as a result of geophysical hazards (tsunamis, landslides, earthquakes, volcanic eruptions)?	No	
Natural resources		
5. Would the project lead to unsustainable natural resource management practices (fisheries, forestry, livestock) and/or result in exceeding carrying capacity. For example, is the development happening in areas where little up-to-date information exists on sustainable yield/carrying capacity?	No	
6. Would the project develop large-scale ¹⁴ aquaculture or mariculture projects, or where their development involves significant alteration of ecologically sensitive areas?	No	
7. Would the project result in significant use of agro-chemicals which may lead to life-threatening illness and long-term public health and safety concerns?	No	
8. Does the project rely on water-based (groundwater and/or surface water) development where there is reason to believe that significant depletion and/or reduced flow has occurred from the effects of climate change or from overutilization?	No	

9. Does the project pose a risk of introducing potentially invasive species or genetically modified organisms which might alter genetic traits of indigenous species or have an adverse effect on local biodiversity?	No	
10. Does the project make use of wastewater (e.g. industrial, mining, sewage effluent)?	No	
Infrastructure development		
11. Does the project include the construction/rehabilitation/upgrade of dam(s) and/or reservoir(s) meeting at least one of the following criteria? - more than 15 meter high wall; - more than 500 meter long crest; - more than 3 million m ³ reservoir capacity; or - incoming flood of more than 2 000 m ³ /s	No	
12. Does the project involve large-scale irrigation schemes rehabilitation and/or development (more than 100 hectares per scheme)?	No	
13. Does the project include construction/rehabilitation/upgrade of roads that entail a total area being cleared above 10 km long, or any farmer with more than 10 per cent of his or her private land taken?	No	
14. Does the project include drainage or correction of natural waterbodies (e.g. river training)?	No	
15. Does the project involve significant extraction/diversion/containment of surface water, leaving the river flow below 20 per cent environmental flow plus downstream user requirements?	No	
Social		
16. Would the project result in economic displacement or physical resettlement of more than 20 people, or impacting more than 10 per cent of an individual household's assets?	No	
17. Would the project result in conversion and/or loss of physical cultural resources?	No	
18. Would the project generate significant social adverse impacts to local communities (including disadvantaged and vulnerable groups and indigenous people) or other	No	
Other		

19. Does the project include the manufacture and transportation of hazardous and toxic materials which may affect the environment?	No	
20. Does the project include the construction of a large or medium-scale industrial plant?	No	
21. Does the project include the development of large-scale production forestry?	No	
Rural finance		
22. Does the project support any of the above (Question 1 to Question 21) through the provision of a line of credit to financial service providers?	No	

Category B –the following may have some adverse environmental and/or social implications which can be readily remedied.

Location

23. Does the project involve agricultural intensification and/or expansion of cropping area in non-sensitive areas that may have adverse impacts on habitats, ecosystems and/or livelihoods?	Yes	The project involves expansion of cropping area (Increase in area of tea and orchard) that may lead to excessive fertilization, high pesticide residues and non-point
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Natural resource management

24. Do the project activities include rangeland and livestock development?	Yes	China's environmental regulations for livestock farms including permits and periodic control visits will apply and Hunan's policy for recycling animal waste will be supported
25. Does the project involve fisheries where there is information on stocks, fishing effort and sustainable yield? Is there any risk of overfishing, habitat damage and knowledge of fishing zones and seasons?	NO	
26. Would the project activities include aquaculture and/or agriculture in newly introduced or intensively practiced areas? Do project activities include conversion of wetlands and clearing of coastal vegetation, change in hydrology or introduction of exotic species?	Yes	The project includes agriculture in newly introduced, which introduces the new vegetable varieties such as radish, and builds complete industrial chain.
27. Do the project activities include natural resource-based value chain development?	Yes	The project mainly focus on the land resource development. Based

28. Do the project activities include watershed management or rehabilitation?	NO	
29. Does the project include large-scale soil and water conservation measures?	Yes	Some terraces were built to grow organic tea, and terrace
Infrastructure		
30. Does the project include small-scale irrigation and drainage, and small and medium dam subprojects (capacity < 3 million m ³)?	Yes	The project will support the construction of small-scale irrigation and drainage ,and small and medium dam subprojects.
31. Does the project include small and microenterprise development subprojects?	No	
32. Does the project include the development of agro-processing facilities?	Yes	The project would support development of electricity lines to village farms and agribusiness entities. These interventions would bring enable electricity supply to irrigation systems, agro-processing plants.
33. Would the construction or operation of the project cause an increase in traffic on rural roads?	Yes	Moderate Increase
Social		
34. Would any of the project activities have minor adverse impacts on physical cultural resources?		
35. Would the project result in physical resettlement of 20 people or less, or impacting less than 10 per cent of an individual household's assets?		
36. Would the project result in short-term public health and safety concerns?		
37. Would the project require a migrant workforce or seasonal workers (for construction, planting and/or harvesting)?		
Rural finance		

38. Does the project support any of the above (Question 23 to Question 37) through the provision of a line of credit to financial service providers?	Yes	Financing of Agribusinesses, agro-processing facilities and marketing infrastructure
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Guidance for categorization:

<p>"Yes" response to any questions between 1 and 22</p>	<p>Environmental and social category is A</p>	<p>Environmental and Social Impact Assessment or an Environmental and Social Management Framework(full or specific) is required depending on availability of information.</p> <p>Also some specific questions would require the below specific actions:</p> <ul style="list-style-type: none"> • Yes to Q16 – A Resettlement Action Plan or a Resettlement Action Framework is required depending on availability of information. • Yes to Q17 – A Physical Cultural Resources Management Plan is required that includes provisions for managing chance finds at implementation. • Yes to Q18 – Free, prior and informed consent should be obtained/Free, Prior and Informed Consent Implementation Plan is required depending on whether the affected communities are identifiable. In instances where indigenous peoples are affected an Indigenous Peoples Plan is required. A Social Impact Assessment is required. • Yes to Q8 and/or Q15 – A water resources management plan for the project is required. • Yes to Q7, Q9 and/or Q19 – A Pest Management Plan is required.
<p>"No" responses to all Q1-Q22 and "Yes" response to any questions between 23 and 38</p>	<p>Environmental and social category is B</p>	<p>An environmental and social analysis to develop an Environmental and Social Management Plan (ESMP) is required.</p>
<p>"No" response to all questions</p>	<p>Environmental and social</p>	<p>No further analysis is required.</p>

between 1 and 38	category is C
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In case projects fall under both Category A and B, the highest category will be taken as reference. The determination of the project category and classification will depend on the magnitude of impacts and would depend on the scale of such activities; a cautious approach to the concern of cumulative impacts is considered essential. In such cases, the necessary environmental and social analysis and associated budget should be incorporated into project design. Such projects may be considered for Category B.

Determining the environmental and social Category A, including the extent of assessments and studies to be conducted, will also take into account available information, i.e. recent studies and assessments, including other initiatives in the country, to the extent these are relevant to the proposed project.

Declassification (from A to B or from B to C) may also be possible in case negative externalities are being addressed by other projects or activities implemented by third parties.

Guiding questions for climate risk screening

Guiding questions for climate risk screening	Yes	No	Additional Explanation of “yes” response*
1. Is the project area subject to extreme climatic events, such as flooding, drought, tropical storms or heat waves?	Yes		Flood caused by heavy rainfall, heat damage, consecutive drought,
2. Do climate scenarios for the project area foresee changes in temperature, rainfall or extreme weather that will adversely affect the project impact, sustainability or cost over its lifetime?	Yes		There will be a projection of future temperature, rainfall or extreme weather.
3. Would the project make investments in low-lying coastal areas/zones exposed to tropical storms?	No		
4. Would the project make investments in glacial areas and mountains zones?	Yes		Invest in honeysuckle industry in the cold highland area in the north of Longhui county. Invest in mountain tea
5. Would the project promote agricultural activity in marginal and/or highly degraded areas that have increased sensitivity to climatic events (such as on hillsides, deforested slopes or floodplains)?	No		

6. Is the project located in areas where rural development projects have experienced significant weather-related losses and damages in the past?	Yes		The citrus industry in Shimen county experienced low temperature and frozen damage last year, with 80 percent of its planted area reduced or totally lost. There is a consecutive drought in Luxi county
7. Would the project develop/install infrastructure in areas with a track record of extreme weather events?	Yes		Develop/install irrigation/water-saving infrastructure in drought-prone areas and develop/install drainage facilities in
8. Is the project target group entirely dependent on natural resources (such as seasonal crops, rainfed agricultural plots, migratory fish stocks) that have been affected by in the last decade by climate trends or specific climatic events?	No		
9. Would climate variability likely affect agricultural productivity (crops/livestock/fisheries), access to markets and/or the associated incidence of pests and diseases for the project target groups?	Yes		Rising temperatures in winter can lead to an increase in pests and diseases. Too much or too little precipitation will
10. Would weather-related risks or climatic extremes likely adversely impact upon key stages of identified value chains in the project (from production to markets)?	Yes		Extreme climate can affect agricultural production and storage, as well as the market. For example, insufficient accumulated temperature or rainfall
11. Is the project investing in climate-sensitive livelihoods that are diversified?	Yes		Increase the diversity of livelihoods to decrease the sensitivity to climate change.
12. Is the project investing in infrastructure that is exposed to infrequent extreme weather events?	No		

13. Is the project investing in institutional development and capacity-building for rural institutions (such as farmer groups, cooperatives) in climatically heterogeneous areas?	Yes		Effective information sharing, education and specific training
14. Does the project have the potential to become more resilient through the adoption of green technologies at a reasonable cost?	Yes		Green technologies such as water-saving irrigation, integrated water and fertilizer technologies will
15. Does the project intervention have opportunities to strengthen indigenous climate risk management capabilities?	Yes		All the interventions would increase climate risk management capabilities.
16. Does the project have opportunities to integrate climate resilience aspects through policy dialogue to improve agricultural sector strategies and policies?	Yes		All technologies adopted in the project should both increase climate resilience and agricultural
17. Does the project have potential to integrate climate resilience measures without extensive additional costs (e.g. improved building codes, capacity- building, or including climate risk issues in policy processes)?	Yes		Some technologies have the potential to integrate climate resilience measures without extensive additional costs, such
18. Based on the information available would the project benefit from a more thorough climate risk and vulnerability analysis to identify the most vulnerable rural population, improve targeting and identify additional complementary investment actions to manage climate risks?	Yes		There will be a vulnerability assessment to identify the most vulnerable rural population in this project.

II. ESMP Plan and Matrix

Attachment 3: ESMP

Objective

1. The objective of the Environmental and Social Management Plan (ESMP) is to make sure that all environmental, social and climate change risks related to the project's activities and investments are properly identified, managed and mitigated. For more details on the risks related to the project, see the full analysis in the SECAP main document. The below table outlines the project interventions and related environment and social risks and impacts and their associated mitigation measures, roles and responsibilities in implementing the mitigation measures, frequency of monitoring and related budget. This framework shall be finalized as part of the Project Implementation Manual (PIM) at project start up and updated and adjusted as needed during project implementation.

Grievance and Redress Mechanism (GRM)

2. The project will follow IFAD's Complaints Procedure which ensures that appropriate mechanisms are in place to allow individuals and communities to contact IFAD directly and file a complaint if they believe they are or might be adversely affected by an IFAD-funded project/programme not complying with IFAD's Social and Environmental Policies and mandatory aspects of SECAP.
3. IFAD's Grievance and Redress Mechanism shall be fully explained to stakeholders during the programme's start-up workshop and to beneficiaries during the programme's activities. The complainants should first bring the matter to the attention of the County Project Management Offices (PMOs) of the County Agriculture and Rural Development Agencies (CARAs) or the Provincial Project management Office (PPMO) of the Provincial Agriculture and Rural Development Agency (DARA). If the PMOs or PPMO do not adequately respond, the matter may be brought to the attention of IFAD. The issue may also be brought straight to IFAD if the complainants feel they might be subject to retaliation if they bring it first to the PMOs or the PPMO.
4. Grievances shall be addressed at the field level by the project team which will be the first layer of redressal mechanism. If the grievance is not resolved at the field level, it will be escalated to the PPMO and then to IFAD who will be responsible for addressing grievances related to violations of the Programme's SECAP reflecting IFAD's social and environmental policies and standards.

5. As provided by IFAD’s Policy on prevention and response to Sexual Exploitation and Abuse (SEA, 2018), all contracts with project personnel, contractors, service providers and other third parties, that are funded with IFAD funds, must include provisions: (i) for prohibiting acts of AES; (ii) that establish the obligation to immediately report to IFAD or the Government incidents of SEA; and (iii) that establish immediate termination of contract based on proven acts of SEA.
6. Likewise, all contracts with contractors and service providers and other third parties must include provisions for the protection of labour rights and working conditions.
7. All grievances (including reports on SEA and violations of worker rights and conditions) received and action taken to address them will be reported to the relevant PMO, PPMO and the Steering committee. The PMOs and the PPMO shall ensure that all complaints received and actions taken are included in the progress reports to IFAD.
8. As detailed in the ESMP table below, all infrastructure investments are foreseen to be within IFAD’s environmental and social risk category B. As part of the approval of any concrete infrastructure investment to be financed under the project, the PMOs (monitored by the PPMO) must verify if its dimensions are exceeding the thresholds listed in the table below, which would trigger an environmental risk Category A. In the case the thresholds are exceeded IFAD must be contacted before any investments are made to discuss and agree on the environmental and social impact assessments needed and risk mitigation measures to be implemented.

Criteria and thresholds for infrastructure investments that will trigger an environmental and social risk category A

Irrigation	The investment includes the construction/rehabilitation/upgrade of dam(s) and/or reservoir(s) meeting at least one of the following criteria <ul style="list-style-type: none"> - more than 15 metre high wall; - more than 500 metre long crest; - more than 3 million m³ reservoir capacity; or - incoming flow of more than 2,000 m³/s
	The investment involve large-scale irrigation schemes rehabilitation and/or development (more than 100 hectares per scheme) ¹⁵

¹⁵ The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. China’s regulations determining size of irrigation development requiring a full ESIA will be adopted where they exist. However, where there

	The investment include drainage or correction of natural waterbodies
	The investment involve significant extraction/diversion/containment of surface water, leaving the river flow below 20 per cent environmental flow plus downstream user requirements
Roads	The investment include construction/ rehabilitation/upgrade of roads that entail a total area being cleared above 10 km long, or any farmer with more than 10 per cent of his or her private land taken
All infrastructure	The investment will cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. conversion of more than 50 hectares of natural forest, loss of habitat, erosion/other form of land degradation, fragmentation and hydrological changes).
	The investment area include ecologically sensitive areas, ¹⁶ areas of global/national significance for biodiversity conservation, and/or biodiversity-rich areas and habitats depended on by endangered species
	The investment will result in economic displacement ¹⁷ or physical resettlement of more than 20 people, or impacting more than 10 per cent of an individual household's assets

are no standards, it is proposed to use 100 hectares as an irrigation development unit size to trigger an ESIA.

¹⁶ "Sensitive areas" include: protected areas (national parks, wildlife/nature reserves, biosphere reserves) and their buffer zones; areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation, areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance), and areas with high social vulnerability.

¹⁷ Economic displacement implies the loss of land, assets, access to assets, income sources, or means of livelihoods.

Interventions	Social, Environmental & Climate Risks and Impacts	Mitigating Measures	Frequency of Monitoring	Responsible Institution	Cost
<i>All interventions</i>	Unmitigated Risks causing adverse impacts on rural people and livelihoods in the project area	<ul style="list-style-type: none"> • Strict application of the Grievance Redress Mechanism (GRM). • Ensure dissemination of the GRM to local communities prior to starting project activities. • Maintain solid documentation for the received complaints during the operation of the project and track the level of responsiveness (provision of feedback). • Swift action and redressal on farmer complaints/ apprehensions. 	<ul style="list-style-type: none"> • Quarterly review of the number of complaints received. • Quarterly review of the number of complaints addressed, the mechanisms used and the time it took to address them. 	<ul style="list-style-type: none"> • PMOs and PPMO. If not solved then IFAD. 	<ul style="list-style-type: none"> • \$2,500 (PPMO admin budget)
<i>All interventions</i>	<u>Social:</u> Beneficiary Dissatisfaction and Discrimination	<ul style="list-style-type: none"> • Collect feedback on project performance and beneficiary satisfaction from women and men of various ethnic and age groups, with special representation of vulnerable households, through focus group discussions. • Convey the feedback and actions taken accordingly to beneficiary. 	<ul style="list-style-type: none"> • Annual surveys. • Focus group discussions 	<ul style="list-style-type: none"> • PMOs and PPMO 	<ul style="list-style-type: none"> • \$4,000 (M&E budget)

<p><i>All interventions</i></p>	<p><u>Social:</u> Gender issues and all forms of Gender Based discrimination and exclusion from project benefits and leadership roles.</p>	<ul style="list-style-type: none"> • Inclusive Gender transformative approach is taken in project design • Institutions like Women Federation and Youth league are playing lead role in devising the gender based discrimination and redressing any exclusion of social group • Capacity building and special training will be imparted. • A gender specialist will be in project to monitor the gender related issues and streamline the gender empowerment. Such redressal measures are reflected in TORs. • Project target 50% outreach as women and make sure gender disaggregated target in all project activities. • Pro-WEAI empowerment indicators (production, resources, income, leadership, time) • (PMOs and PPMO to have gender and social inclusion experts and gender balance among their staff. All staff to have minimum gender training. • Achievement of gender quotas for beneficiaries of the various activities (on average at least 50% women), as established in the Logframe and PIM, to be closely monitored. Corrective actions to be promptly taken if falling behind in achieving the targets. • Gender training for men and women raising awareness on gender based discrimination and leadership training for women to be given to members of cooperatives, 	<ul style="list-style-type: none"> • Quarterly collecting gender disaggregated monitoring and evaluation data to track the extent to which women have been able to participate and benefit from project activities and take leading roles and positions. • Pro-WEAI indicator in baseline survey 	<ul style="list-style-type: none"> • PMOs and PPMO M&E responsible 	<ul style="list-style-type: none"> • Included in M&E budget and \$6,000 (Capacity building budget)
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		Water Users Associations (or their likes), and start-ups entrepreneur groups.			
Component A: Inclusive Private Sector Investment Models					
<p>Activity A.1.1: Investment Support for Rural Business</p> <p>Activity A.1.2: Business Start-up support for youth and women</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> Women, Youth and vulnerable & ethnic households are not adequately engaged and benefiting from the improved business of New Economic Entities supported by the project <p><u>Environmental:</u></p> <ul style="list-style-type: none"> Increased production with inadequate 	<p><u>Social: (PIM chapter 3 attachment 1)</u></p> <ul style="list-style-type: none"> The targeting arrangement will ensure the relatively poor and ethnic concentrated villages will be prioritized; Eligibility and financing rules of the Business Plans to be supported by the project will include requirement and preference for inclusion of poor households and women; The operational standards include criteria for fair benefit sharing of profits. Compliance with the standards will be verified by an independent third party and by IFAD SIS missions; Business plan proposals to include an assessment of all social exclusion and adverse impact risks and proper mitigation measures including measure to ensure inclusion and benefits to women youth and poor and vulnerable households Project have allocated special funds to support the start up business of youth and women <p><u>Environmental: (PIM chapter 3 attachment 2)</u></p>	<ul style="list-style-type: none"> Initial verification and annual follow up verification of compliance with social inclusion standards 	<ul style="list-style-type: none"> Independent third party and PMOs and PPMO 	<ul style="list-style-type: none"> \$5,000 (M&E budget)

	<p>practices may increase soil erosion, pollution from agrochemicals and waste from processing activities</p>	<ul style="list-style-type: none"> • Business plan proposals to include: 1) an assessment of all environmental risks and mitigation measures related to the agricultural production and eventual processing activities; and 2) documentation of how the investments in production and processing activities will comply with local environmental standards and required certificates • TAG and CPMO to review the environmental risk assessment of the business plans and compliance with IFAD and the governments environmental standards before the approval of the business plan and matching grant • Key environmental and social risk mitigation measures to be included in the Financing Agreement between the agro-entities and the county PMO • Training and technical assistance provided as needed to the cooperative farmers, livestock keepers and to operators and employees of related processing plants in: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and 	<ul style="list-style-type: none"> • Annually monitoring of cooperative's compliance with environmental and social safeguards including all mitigation measures included in the business plans and financing agreements 	<ul style="list-style-type: none"> • County PMOs with periodic checks by the PPMO 	
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		resources use efficiency); and operation of renewable energy technologies.			
Activity A.3 Professional Farmer Training Promoting Gender Sensitive Professional Farmer Training	<p><u>Social:</u></p> <ul style="list-style-type: none"> No social risks identified for this activity <p><u>Environment:</u></p> <ul style="list-style-type: none"> Inadequate inclusion of environmental related knowledge in the training curriculum; Trained farmers do not apply proper measures conducive to environment 	<p><u>Environmental: (PIM chapter 3 attachment 2)</u></p> <ul style="list-style-type: none"> Environmental awareness and environmental friendly measures and technologies will be incorporated in the curriculum; CPMOs and technical agencies in the project counties will undertake follow-up visits to trained farmers on their application of learning from the training, among others. 	<ul style="list-style-type: none"> Annually monitoring of Professional Farmer Training program's compliance with environmental and social safeguards including all mitigation measures. 	<ul style="list-style-type: none"> County PMOs with periodic checks by the PPMO 	<ul style="list-style-type: none"> Part of M&E activity.
Activity A.2.1: Business Incubation Service Center Support	<p><u>Social:</u></p> <ul style="list-style-type: none"> Women, youth and vulnerable households are not 	<p><u>Social: (PIM chapter 3 attachment 3)</u></p> <ul style="list-style-type: none"> Application of concrete targeting strategies to attract young women to the Business Incubation Service Centers (BISC) in collaboration with the All-China-Women-Federation. 	<ul style="list-style-type: none"> Initial verification and annual follow up verification of compliance with social safeguards 	<ul style="list-style-type: none"> Independent third party and PMOs and PPMO 	<ul style="list-style-type: none"> \$5,000 (Capacity building budget)

	<p>adequately served by the centers.</p> <ul style="list-style-type: none"> Biased selection of clientele for the services <p><u>Environmental:</u></p> <ul style="list-style-type: none"> Business investment plans pay inadequate attention to environmental issues resulting in pollution, wastes and environmental degradation 	<ul style="list-style-type: none"> Monitor closely the participation of women among the beneficiaries, and take action if below 50%. <p><u>Environmental: (PIM chapter 3 attachment 2)</u></p> <ul style="list-style-type: none"> Curriculum of IC training will include environmental related issues, in addition to business management such as: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and resources use efficiency); and operation of renewable energy technologies. Advisory and facilitations provided by IC/BS will also cover environmental related aspects and given preference to environmental friendly business opportunities and sub-sectors 	<p>and inclusion standards</p> <ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 	
<p>Activity A.2.2: Public institution based rural services (i.e Climate services, epidemic</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> Geographic and cognitive constraints preventing certain communities not 	<p><u>Social: (PIM chapter 3 attachment 3)</u></p> <ul style="list-style-type: none"> Different forms of messages/channels will be employed in communicating information relating to and generated by the project services Platforms of professional farmer training and other opportunities will be exploited to address the social risks; 	<ul style="list-style-type: none"> Initial verification and annual follow up verification of compliance with social safeguards and inclusion standards 	<ul style="list-style-type: none"> PMOs and PPMO 	<p>\$5,000 (Capacity building budget)</p>

<p>prevention and mitigation, land management, pest management and transfer services etc)</p>	<p>adequately covered by the services;</p> <p><u>Environmental risks:</u></p> <ul style="list-style-type: none"> • Inadequate application of environmental friendly measures resulting in pollution, wastes and environmental degradation • This section should also include risks and impacts to the project from COVID-19 and recommend mitigation measures 	<p><u>Environmental: (PIM chapter 3 attachment 2)</u></p> <ul style="list-style-type: none"> • There will be a regular : 1) an assessment of all environmental risks and mitigation measures related to the agricultural production and eventual processing activities; and 2) documentation of how the investments in production and processing activities will comply with local environmental standards and required certificates • TAG and CARA to review the environmental risk assessment and compliance with IFAD and the governments environmental standards before providing such services. • Training and technical assistance provided as needed to the cooperative farmers, livestock keepers and to operators and employees of related processing plants in: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and resources use efficiency); and operation of renewable energy technologies 	<p>Annually monitoring of cooperative’s compliance with environmental and social safeguards including all mitigation measures included in the business plans and financing agreements</p>		

Component B: Climate Proofed Public Infrastructure and Improvement of Rural Living Conditions					
<p>Activity B.1.1 Climate proofed Smart irrigation</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> Economic displacement by conversion of farmland to water ponds and pools. Will only affect very small areas (25m² -100m²) and no farmer affected will lose more than 10% of his/her land Ad hoc organisation of O&M of irrigation systems and infrastructure may affect sustainability 	<p><u>Social (PIM activity B.1.1 description)</u></p> <ul style="list-style-type: none"> Transparent, informed and documented discussion with all farmers benefitting from the planned irrigation system to reach voluntary signed consent with land user rights holders for placing water ponds or pools on their land. Farmers may decide compensating affected farmers by transferring user rights to land from non-affected farmers. Establishment of water users associations (WUA) or other O&M associations/groups at the irrigation infrastructure planning phase and involve them in the design of the irrigation system and the development of an O&M plan, including roles and responsibilities, budget and cost recovery mechanism. Training of WUA or other O&M group in irrigation water management using rainfall forecasts and operation and maintenance of water infrastructure 	<ul style="list-style-type: none"> Six-monthly monitoring of application of environmental and social risk management measures 	<ul style="list-style-type: none"> County PMO backed up by the County Water Bureaus as needed 	<ul style="list-style-type: none">
<p>Activity B.2.1 Improvement and development of safe drinking water supply</p>	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> Downstream impacts on water ecological systems from overuse of the water source 	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> Surface water resources are in general plentiful in the rainy mountainous province (1200-1500 mm/year. The water source for the irrigation system investments will in most cases be water harvested and stored from mountain streams and springs. In some cases, it will pumped water from the rivers. The minimum dry 			

	<ul style="list-style-type: none"> • Conversion of forest land to reservoirs and pumping stations • Drainage water polluted with agrochemicals • Low efficiency in usage of irrigation water – 	<p>season streamflow of those rivers are bigger than 1m³/second. The water volume intake will in all cases be far below the 0.028m³/second. There will be no pumping in the peak of the dry season where irrigation water will come from the stored water in ponds and reservoirs. There will be no pumping of ground water financed by the project.</p> <ul style="list-style-type: none"> • The water harvesting and irrigation infrastructures financed by the project are small scale and low risks with ponds or small reservoir from 4-400m³. Only limited land areas will be used for reservoirs and pumping stations. Most of this land is currently village collectively owned barren land¹⁸ • Only limited land areas will be used for reservoirs and pumping stations. Most of this land is currently village collectively owned barren land. • In most cases drip and sprinkler irrigation will be used and only in few cases surface/flood irrigation will be used for paddy fields, where proper drainage will be designed. • Farmers to be trained in IPM in line with the government’s action plan for capacity building and introduction of practices for reduction in the use of 			
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¹⁸ Regulations on the Management of Water Conservancy Projects in Yunnan Province (March 2018)

	<p>potential risk during construction</p>	<p>agrochemical, which has already led to a 30% reduction in pilot examples in some of the project counties. An important part of the production in the project areas are organic or green production certified meaning limited use of agrochemicals.</p> <ul style="list-style-type: none"> • WUAs or other O&M associations/ group in areas of water scarcity will be trained in adaptive water management for water use efficiency under different climate conditions using digital water monitoring of water productivity and use efficiency • Measures to mitigate any potential risk during the construction, which also address health and safety risks of the constructions workers, surrounding communities and the environment 			
<p>Activity B.2.2: Improvement and development of road systems.</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> • Economic displacement by conversion of farmland to roads. Will affect limited areas and no farmer affected will lose more than 10% of his/her land • Ad hoc organisation of O&M of rural 	<p><u>Social (PIM activity B.1.1 description)</u></p> <ul style="list-style-type: none"> • Transparent, informed and documented discussion with all farmers benefitting from the road and affected by its routing to reach voluntary signed consent with land user rights holders of farmland proposed for conversion to the road. Farmers may decide compensating affected farmers by transferring user rights to land from non-affected farmers. Monetary compensation may also be used. • Before the investment in any road infrastructure an operation and maintenance (O&M) plan for each 	<ul style="list-style-type: none"> • Six-monthly monitoring of application of environmental and social risk management measures 	<ul style="list-style-type: none"> • County PMO backed up by CARAs as needed 	<ul style="list-style-type: none"> •

	<p>roads may affect their sustainability</p> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> • Soil erosion and increased risks of landslides from improper drainage and interventions on slopes and mountain sides removing vegetation • potential risk during construction 	<p>section of the roads must be prepared, including roles and responsibilities, budget and sources of funding</p> <p><u>Environmental:</u></p> <ul style="list-style-type: none"> • There will be a mixture of upgrading of existing roads and construction of new roads. Most of the roads are too small to require an environmental assessment. The responsibility for rural roads has been transferred to the CARA, who will oversee that proper erosion control and drainage measures are built into the bidding process, contracts, and the engineering design before they give the final permission for the road construction. • Measures to mitigate any potential risk during the construction, which also address health and safety risks of the constructions workers, surrounding communities and the environment 			
<p>Activity B.2.4 Land improvement and preparation</p>	<p><u>Environmental</u></p> <ul style="list-style-type: none"> • Loss of topsoil when levelling land and constructing terraces. 	<p><u>Environmental:</u></p> <ul style="list-style-type: none"> • Addition of organic to the soil after the levelling should be applied as part of the land improvement approach. 	<ul style="list-style-type: none"> • Verification in the field 	<ul style="list-style-type: none"> • County PMOs and CARAs 	<ul style="list-style-type: none"> •

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China

Hunan Rural Revitalization Demonstration Project Project Design Report

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

Mission Dates: 27/04/2020 22/05/2020
Document Date: 12/10/2020
Project No. 2000002359
Report No. 5499-CN

Asia and the Pacific Division
Programme Management Department

Annex: 6 First Annual Work Plan and Budget (AWPB-2021)

1. Following tables 1, 2 & 3 contains first annual work plan (AWPB-2021) for component A (Inclusive Private Sector Investment Models), Component B (Climate-Proofed Public Infrastructure Planning, Development & Improvement) and Component C (Project Management, M&E, KM and Policy).
2. As provided in Section 7.05 of the General Conditions, procurement of goods, works and services shall be carried out in accordance with the provisions of the Borrower/Recipient's procurement regulations, to the extent such are consistent with the IFAD Project Procurement Guidelines. Each AWPB must contain a Procurement Plan (see Annex-7), which shall identify procedures which must be implemented by the Borrower/Recipient in order to ensure consistency with the IFAD Project Procurement Guidelines¹.
3. AWPB and procurement plan should be submitted through the NOTUS ("No Objection Tracking Utility System (NOTUS)" for IFAD's 'No Objection' and tracking purpose. An IFAD Procurement Plan template will be provided to the project management to guide its preparation of the first procurement plan, which shall include as a minimum:
 - a. A brief description of each procurement activity to be undertaken during the period by each and every Project Party;
 - b. The estimated value of each procurement activity;
 - c. The method of procurement or selection to be adopted for each activity; and
 - d. A reference to the AWPB;
 - e. An indication as to whether the Fund shall carry out prior or post review in respect of each and every procurement activity.
4. Any amendments to the AWPB and Procurement Plan shall be processed through NOTUS and be subject to the Fund's 'No Objection'.

¹ IFAD Project Procurement Guidelines -

https://www.ifad.org/documents/38711624/39421027/procure_e.pdf/e1a99511-d57d-4695-a05b-3d9b597d0149.

Table: 1 First Annual Work Plan and Budget (AWPB- 2021); (Component A- Inclusive Private Sector Investment Models)

表Table 1: 国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2021 AWPB by Component 项目实施与投资费用计划汇总表 (Component A 子项一)															
报告单位: 湖南省项目办 By Provincial PMO			报告日期: 2020 年6 月15 日				Unit 单位: 千元 '000 CNY								
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划					占目标%		
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier						
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben		Ope	Total
农发	政府	受益人	经营主体	合计	农发	政府	受益人	经营主体	合计						
A、Inclusive Private Sector Investment Models 包容性私营部门投资模式															
A.1	Inclusive rural business development 包容性产业发展														
	1. Business Plan for New Economic Entities 新型经营主体商业计划	份each	236.00	211,453.0	158082		143,003.0	512,538.0	80.00	69,990.0	52,325.0	-	47,334.0	169,649.0	33%
	2. Start up financing for youth/women 年轻人妇女创业资金	份each	317.00	30,799.0			7,700.0	38,499.0	104	9,862.0	-	-	2,466.0	12,328.0	32%
	A.1 小计 Subtotal			242,252.0	158,082.0	-	150,703.0	551,037.0		79,852.0	52,325.0	-	49,800.0	181,977.0	33%
A.2	Rural business development services 产业发展与农村事务服务														
A.2-1	Agri-business development 经营主体发展			35,592.0	-	-	-	35,592.0							
	a) Business incubation / Service centres 孵化中心			32,906.0	-	-	-	32,906.0		7,354.0	-	-	-	7,354.0	22%
	1 Setting up 中心建立	个 Center	10.00	2,506.0				2,506.0	4	987				987.0	39%
	2 Tech assistance to service centers 对中心的技术支持	批次 lot	50.00	16,155.0				16,155.0	20.0	6,367.0				6,367.0	39%
	3 Technical to clients of various needs 对客户的技术服务	批次 lot	50.00	6,227.0				6,227.0						-	0%
	4 Review and support of Business Plan 商业计划审核	lumpsum 年并	50.00	8,018.0				8,018.0						-	0%
	b) Youth and women business capacity building 对年轻人和妇女的创业能力建设		140.00	2,686.0	-	-	-	2,686.0						-	0%
	1 Mentoring of start up candidates 辅导和培训		140.00	2,686.0				2,686.0						-	0%
A.2-2	Inclusive rural service			18,023.0	1,800.0	-	-	19,823.0		4,503.0	-	-	-	4,503.0	23%
	a) Climate smart services 智慧型天气服务		120.0	3,700.0	1,800.0	-	-	5,500.0	32.0	1,458.0	-	-	-	1,458.0	27%
	1 Monitoring and early warning systems 监测和预报系统	个 each	40.00	2,960.0				2,960.0	16.0	1,166.0				1,166.0	39%
	2 Capacity building and technical services 能力建设和技术服务	个 each	40.00	740.0				740.0	16.0	292.0				292.0	39%
	3 Climate related insurance 气候相关的保险服务	个 each	40.00		1,800.0			1,800.0						-	0%
	b) Epidemic prevention and mitigation (SARS-CoV-2) 传染病防控		60.0	1,013.0	-	-	-	1,013.0	30.0	565.0	-	-	-	565.0	56%
	1 Developing guidelines 开发指南和手册	lumpsum	10.00	273.0				273.0	10.0	273.0				273.0	100%
	2 Providing expert assessment and design risk mitigation measures 防控的评估和措施设计	个 each	50.00	740.0				740.0	20.0	292.0				292.0	39%
	c) Other Production and rural services 其它服务	-	102.0	13,310.0	-	-	-	13,310.0	20.0	2,480.0	-	-	-	2,480.0	19%
	1 Inputs 必要的投入物支持	lumpsum	51.00	10,874.0				10,874.0	10.0	2,026.0				2,026.0	19%
	2 Provision of collective services 服务的提供支持	lumpsum	51.00	2,436.0				2,436.0	10.0	454.0				454.0	19%
	A.2 小计 Subtotal			53,615.0	1,800.0	-	-	55,415.0		4,503.0	-	-	-	4,503.0	8%

表Table 1:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2021 AWPB by Component 项目实施与投资费用计划汇总表 (Component A 子项一)

报告单位: 湖南省项目办 By Provincial PMO

报告日期: 2020年6月15日

Unit 单位: 千元 '000 CNY

序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben	Ope		Total
农发	政府	受益人	经营主体	合计	农发	政府	受益人	经营主体	合计						
A、Inclusive Private Sector Investment Models 包容性私营部门投资模式															
A.3	Recurrent Costs														
	a) Staff salary 员工工资			6,040.0				6,040.0		1,208.0		-	-	1,208.0	20%
	1. Staff salary 员工工资	人/年	100.00	6,040.0			6,040.0	20.00	1,208.0					1,208.0	20%
	b) Other operating costs 其他运行费用			3,000.0	3,000.0	-	-	6,000.0		600.0	600.0	-	-	1,200.0	20%
	Rental expenditure 租赁费用	office year 办公室/年	50.00		3,000.0			3,000.0	10.00		600.0			600.0	20%
	Office operating costs 办公室运行费用	office year 办公室/年	50.00	3,000.0				3,000.0	10.00	600.0				600.0	20%
	小计 Subtotal			9,040.0	3,000.0	-	-	12,040.0		1,808.0	600.0	-	-	2,408.0	20%
A.4	Professional Farmer Training 职业农业培训														
	a) Number of trainees 接受培训人数														
	Number of incremental training 增加人数		5000.00	10,529.0				10,529.0	1,000.0	2,003.0				2,003.0	19%
	b) Proportion of women trainees 接受培训者女性占比														
	Incremental trainees 女性增加人数		2068.00	2,905.0				2,905.0	249.0	330.0				330.0	11%
	c) Average age of trainees 接受培训者平均年龄														
	Reduction in age of trainees 减少的平均年龄		71476.00	5,013.0				5,013.0	71,476.0	528.0				528.0	11%
	小计 Subtotal			18,447.0	-	-	-	18,447.0		2,861.0	-	-	-	2,861.0	16%
	Total Component A A部分合计			323,354.0	162,882.0	-	150,703.0	636,939.0		89,024.0	52,925.0	-	49,800.0	191,749.0	30%

Table: 2 First Annual Work Plan and Budget (AWPB- 2021); (Component B- Climate-Proofed Public Infrastructure Planning, Development & Improvement)

表Table 2: 国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component B 子项二)															
报告单位: 湖南省项目办 By Provincial PMO			报告日期: 2020年6月15日				Unit 单位: 千元 '000 CNY								
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben	Ope		Total
农发	政府	受益人	经营主体	合计	农发	政府	受益人	经营主体	合计						
B、支持应对气候变化的公共基础设施规划与建设 Climate-proofed public infrastructure planning, development and improvement															
B.1	Climate Smart Irrigation Infrastructure 气候智能基础设施发展														
	1. Irrigation facilities 灌溉设施			44,509.3	10,672.9			55,182.3		12,332.3	1,608.1			13,940.4	25%
	Irrigation canal灌溉渠道	km	124.6	24,841.8	8,844.8			33,686.6	33.8	7,062.5	1,278.0			8,340.6	25%
	Pressure pipeline输水压力管道工程	个 set	100.0	13,872.4	49.2			13,921.6	29.5	4,022.2	7.9			4,030.1	29%
	Head control and system水源控制系统	个 set	7,521.0	2,019.8	18.9			2,038.8	2,003.0	523.0	4.6			527.5	26%
	Culvert涵洞	亩 mu	137.0	433.8	184.3			618.2	26.0	125.8	25.5			151.3	24%
	Retaining dam拦水坝	公里 km	82.0	1,300.9	1,326.9			2,627.8	17.0	258.6	257.6			516.2	20%
	Aqueduct渡槽	座 set	30.0	708.9				708.9	7.0	159.5				159.5	22%
	Sluice水闸	公里 km	141.0	908.3	32.3			940.6	20.0	122.2	4.4			126.6	13%
	Bridges, canal crossing structures桥涵	套 set	83.0	423.3	216.5			639.9	12.0	58.6	30.1			88.7	14%
	2. Water source facility水源			26,308.3	-	-	-	26,308.3		8,441.3	-	-	-	8,441.3	32%
	Pumping station泵站	site	23.0	2,476.8				2,476.8	6.0	626.1				626.1	25%
	Water pond 水塘	site	110.0	11,261.0				11,261.0	29.0	2,887.9				2,887.9	26%
	Water cellar水窖	site	50.0	238.0				238.0	25.0	117.6				117.6	49%
	Water pool蓄水池	site	306.0	12,332.4				12,332.4	122.0	4,809.8				4,809.8	39%
	3. Drainage ditch排水渠			14,007.0	5,890.0	-	-	19,897.0		2,318.0	3,527.0	-	-	5,845.0	29%
	Drainage ditches 排水渠	公里 km	47.6	14,007.0				14,007.0	8.2	2,318.0				2,318.0	17%
	Drainage ditches, GOC 排水渠-政府	公里 km	3.3		5,890.0			5,890.0	2.0		3,527.0			3,527.0	60%
	B.1 Subtotal 小计			84,824.6	16,562.9	-	-	101,387.6		23,091.7	5,135.1	-	-	28,226.8	28%

表Table 2:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component B 子项二)

报告单位: 湖南省项目办 By Provincial PMO		报告日期: 2020年6月15日		Unit 单位: 千元 '000 CNY											
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier					
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope	Total	占目标%
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计	
B、支持应对气候变化的公共基础设施规划与建设 Climate-proofed public infrastructure planning, development and improvement															
B.2	Public Rural infrastructure 公共基础设施														
	1. Rural roads 农村道路			-	233,863.5	-	-	233,863.5		-	55,534.6	-	-	55,534.6	24%
	Village road 村道	公里 km	193.7		89,628.0			89,628.0	55.2		24,710.2			24,710.2	28%
	Production road 生产路	公里 km	208.0		66,009.3			66,009.3	47.0		14,358.5			14,358.5	22%
	Earth road 田间道	公里 km	191.7		78,226.1			78,226.1	41.9		16,466.0			16,466.0	21%
	2. Drinking water supply 饮水工程			-	22,206.8	-	-	22,206.8		-	9,329.2	-	-	9,329.2	42%
	Water pipeline 输水管道	公里 km	89.6		15,156.9			15,156.9	40.6		6,727.4			6,727.4	44%
	Water source engineering	work	85.0		7,049.9			7,049.9	32.0		2,601.8			2,601.8	37%
	3. Power supply system 供电系统			-	1,347.3	-	-	1,347.3		-	1,027.9	-	-	1,027.9	76%
	Electricity cable line 电力线	公里 km	12.0		880.3			880.3	9.0		656.1			656.1	75%
	Transformers 变压器	each	5.0		467.1			467.1	4.0		371.8			371.8	80%
	4. Land preparation 土地平整	公顷 ha	1451		50,429.6			50,429.6	287.0		9,563.3			9,563.3	19%
	5. Environmental improvements 环境治	lumpsum			68,204.0			68,204.0			12,901.0			12,901.0	19%
	B.2 Subtotal 小计			-	376,051.2	-	-	376,051.2		-	88,356.0	-	-	88,356.0	23%
B.3	Recurrent Cost													-	
	O&M 设施管护	lumpsum	121.0		3,025.0	3,025.0		6,050.0	39.0		975.0	975.0		1,950.0	32%
	Beneficiary training 管护能力培训	per year	1,937.0		145.3	145.3		290.6	453.0		34.0	34.0		68.0	23%
	B.3 Subtotal 小计			-	3,170.3	3,170.3	-	6,340.6		-	1,009.0	1,009.0	-	2,018.0	32%
	Total Component B B部分合计				84,824.6	395,784.5	3,170.3	483,779.4		23,091.7	94,500.0	1,009.0	-	118,600.7	25%

Table: 3 First Annual Work Plan and Budget (AWPB- 2021); (Component C- Project Management, M&E, KM and Policy)

表Table 3: 国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component C 子项三)																
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划								
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope	Total		
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计		
C. Project Management, M&E, KM and Policy 项目管理、监测评价、知识管理以及政策																
C.1	Provincial PMO 省项目办															
	1. Technical assistance				-	1,000.0	-	-	1,000.0		-	200.0	-	-	200.0	20%
	Office equipment 项目办设备	set	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Thematic specialists 主题专家	lumpsum	5.0	-	500.0	-	-	500.0	1.0	-	100.0	-	-	100.0	20%	
	RBL verification service 以结果为导向相关的第三方审核	Lumpsum	5.0	-	500.0	-	-	500.0	1.0	-	100.0	-	-	100.0	20%	
	2. Training 培训				-	2,750.0	-	-	2,750.0		-	670.0	-	-	670.0	24%
	Management workshop & training 项目管理研讨会及培训	lumpsum	5.0	-	1,700.0	-	-	1,700.0	1.0	-	340.0	-	-	340.0	20%	
	Gender focus training 性别主题培训	lumpsum	1.0	-	150.0	-	-	150.0	1.0	-	150.0	-	-	150.0	100%	
	Monitoring & evaluation training 监测评价培训	lumpsum	5.0	-	500.0	-	-	500.0	1.0	-	100.0	-	-	100.0	20%	
	Agri-business related training 经营主体相关培训	lumpsum	5.0	-	400.0	-	-	400.0	1.0	-	80.0	-	-	80.0	20%	
	3. Knowledge management 知识管理				-	1,980.0	-	-	1,980.0		-	396.0	-	-	396.0	20%
	National study tours 国内学习考察	lumpsum	5.0	-	780.0	-	-	780.0	1.0	-	156.0	-	-	156.0	20%	
	Knowledge documents & sharing 知识产品及	lumpsum	5.0	-	1,200.0	-	-	1,200.0	1.0	-	240.0	-	-	240.0	20%	
	4. WF capacity building WF能力建设				-	820.0	-	-	820.0		-	177.5	-	-	177.5	22%
	WF capacity building WF能力建设	lumpsum	4.0	-	270.0	-	-	270.0	1.0	-	67.5	-	-	67.5	25%	
	Knowledge documents & sharing 知识产品及	lumpsum	5.0	-	550.0	-	-	550.0	1.0	-	110.0	-	-	110.0	20%	
	5. Monitoring and evaluation 监测评价				-	2,400.0	-	-	2,400.0		-	1,000.0	-	-	1,000.0	42%
	Baseline survey 基线调查	lumpsum	3.0	-	600.0	-	-	600.0	1.0	-	200.0	-	-	200.0	33%	
	MIS set up 管理信息系统	lumpsum	1.0	-	800.0	-	-	800.0	1.0	-	800.0	-	-	800.0	100%	
	Policy activities 政策活动	lumpsum	4.0	-	1,000.0	-	-	1,000.0	-	-	-	-	-	-	0%	
	C.1 Subtotal 小计				-	8,950.0	-	-	8,950.0	-	-	2,443.5	-	-	2,443.5	27%

表Table 3:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component C 子项三)

序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划					占目标%		
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier						
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben		Ope	Total
				农发	政府	受益人	经营主体		合计	农发	政府	受益人		经营主体	合计
C. Project Management, M&E, KM and Policy 项目管理、监测评价、知识管理以及政策															
C.2	Prefecture office (Xiangxi) 湘西州项目办														
	1. Equipment and materials 项目办公设备	prefecture	-	-	-	-	-	-	-	-	-	-	-		
	2. Workshops and training 项目管理研讨会及培训			-	1,400.0	-	-	1,400.0		-	360.0	-	-	360.0	26%
	Management workshop & training 项目管理研讨会及培训	lumpsum	5.0	-	500.0			500.0	1.0	-	100.0			100.0	20%
	Gender focus training 性别主题培训	lumpsum	1.0	-	100.0			100.0	1.0	-	100.0			100.0	100%
	Monitoring & evaluation training 监测评价培训	lumpsum	5.0	-	500.0			500.0	1.0	-	100.0			100.0	20%
	Agri-business related training 经营主体相关培训	lumpsum	5.0	-	300.0			300.0	1.0	-	60.0			60.0	20%
	3. Knowledge management events 知识管理活动			-	500.0	-	-	500.0		-	100.0	-	-	100.0	20%
	National study tours 国内学习考察	prefecture	5.0	-	250.0			250.0	1.0	-	50.0			50.0	20%
	Knowledge documents & sharing 知识产品及	prefecture	5.0	-	250.0			250.0	1.0	-	50.0			50.0	20%
	4. Monitoring and evaluation 监测评价			-	250.0	-	-	250.0		-	-	-	-	-	0%
	Policy studies 政策研究	lumpsum	4.0	-	250.0			250.0	-	-	-			-	0%
	C.2 Subtotal 小计			-	2,150.0	-	-	2,150.0	-	-	460.0	-	-	460.0	21%

表Table 3:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component C 子项三)

序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben	Ope		Total
农发	政府	受益人	经营主体	合计	农发	政府	受益人	经营主体	合计						
C. Project Management, M&E, KM and Policy 项目管理、监测评价、知识管理以及政策															
C.3	County PMOs 县项目办														
	1. Office equipment 项目办设备			2,390.0	-	-	-	2,390.0		2,390.0	-	-	-	2,390.0	100%
	Office equipment项目办设备	lumpsum	10.0	2,390.0	-	-	-	2,390.0	10.0	2,390.0	-	-	-	2,390.0	100%
	2. Staff training 员工培训			3,650.0				3,650.0		390.0	-	-	-	390.0	11%
	a) National training 国内培训			1,250.0	-	-	-	1,250.0		290.0	-	-	-	290.0	23%
	Project management training 项目管理培训	pers_days	250.0	250.0	-	-	-	250.0	50.0	50.0	-	-	-	50.0	20%
	FM & procurement training 财务采购培训	training	200.0	200.0	-	-	-	200.0	40.0	40.0	-	-	-	40.0	20%
	Gender related training 性别主题培训	pers_days	150.0	150.0	-	-	-	150.0	50.0	50.0	-	-	-	50.0	33%
	Environmental safe guard training 环境主题培训	pers_days	150.0	150.0	-	-	-	150.0	50.0	50.0	-	-	-	50.0	33%
	Technical training 技术相关培训	pers days	500.0	500.0	-	-	-	500.0	100.0	100.0	-	-	-	100.0	20%
	b) workshops and meetings 研讨会及会议			500.0				500.0		100.0	-	-	-	100.0	20%
	Workshops & meetings 研讨会及会议	event	100.0	500.0	-	-	-	500.0	20.0	100.0	-	-	-	100.0	20%
	c) Project study tours 项目考察学习			1,900.0	-	-	-	1,900.0		-	-	-	-	-	0%
	Study tours within the Province 省内考察	persons	500.0	500.0	-	-	-	500.0	-	-	-	-	-	-	0%
	Outside the Province 省外考察	persons	200.0	1,400.0	-	-	-	1,400.0	-	-	-	-	-	-	0%
	3. TA and short-term staff 技术支持以及短期员工			2,710.0				2,710.0		542.0	-	-	-	542.0	20%
	TA consultants技术顾问	lumpsum	50.0	2,000.0	-	-	-	2,000.0	10.0	400.0	-	-	-	400.0	20%
	Short-term staff 短期员工	pers month	100.0	710.0	-	-	-	710.0	20.0	142.0	-	-	-	142.0	20%
	4. M&E and knowledge management 监测评价以及知识管理			5,670.0	-	-	-	5,670.0	20.0	1,134.0	-	-	-	1,134.0	20%
	Monitoring & evaluation 监测评价	lumpsum	50.0	3,500.0	-	-	-	3,500.0	10.0	700.0	-	-	-	700.0	20%
	Knowledge maanagement 知识管理	lumpsum	50.0	2,170.0	-	-	-	2,170.0	10.0	434.0	-	-	-	434.0	20%
	5. Planning and design 勘察设计			-	24,800.0	-	-	24,800.0	10.0	-	4,960.0	-	-	4,960.0	20%
	Planning and design 勘察设计	lumpsum	50.0	-	24,800.0	-	-	24,800.0	10.0	-	4,960.0	-	-	4,960.0	20%
	C.3 Subtotal 小计			14,420.0	24,800.0	-	-	39,220.0		4,456.0	4,960.0	-	-	9,416.0	24%

表Table 3:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component C 子项三)

序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier					占目标%
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope	Total	
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计	
C. Project Management, M&E, KM and Policy 项目管理、监测评价、知识管理以及政策															
C.4	Recurrent Costs 运行费用														
	1. PPMO 省项目办			-	4,500.0	-	-	4,500.0	4.0	-	900.0	-	-	900.0	20%
	staff salaries 员工工资	lumpsum	5.0	-	2,000.0			2,000.0	1.0	-	400.0			400.0	20%
	Travel costs 差旅费	year	5.0	-	1,000.0			1,000.0	1.0	-	200.0			200.0	20%
	Office operating costs 办公室运行费	year	5.0	-	1,000.0			1,000.0	1.0	-	200.0			200.0	20%
	Vehicle renting 车辆租赁	year	5.0	-	500.0			500.0	1.0	-	100.0			100.0	20%
	2. Prefecture PMO 州项目办				550.0	-	-	550.0	3.0	-	110.0	-	-	110.0	20%
	Travel costs 差旅费	staff year	5.0	-	250.0			250.0	1.0	-	50.0			50.0	20%
	Office operating costs 办公室运行费	year	5.0	-	50.0			50.0	1.0	-	10.0			10.0	20%
	Vehicle renting 车辆租赁	year	5.0	-	250.0			250.0	1.0	-	50.0			50.0	20%
	3. County PMOs 县项目办				31,569.9	-	-	31,569.9	50.0	-	6,314.0	-	-	6,314.0	20%
	a) Staff salary (3 staff in each county) 员工工资 (每个县3名员工)				9,999.9	-	-	9,999.9	30.0	-	2,000.0	-	-	2,000.0	20%
	Staff salary 员工工资	per annum	150.0	-	9,999.9			9,999.9	30.0	-	2,000.0			2,000.0	20%
	b) Other operating costs 其他运行费用				21,570.0	-	-	21,570.0	20.0	-	4,314.0	-	-	4,314.0	20%
	Vehicle hiring charges 车辆租赁	per year	50.0	-	4,800.0			4,800.0	10.0	-	960.0			960.0	20%
	Office operating costs 办公室运行费	per year	50.0	-	16,770.0			16,770.0	10.0	-	3,354.0			3,354.0	20%
	C.4 Subtotal 小计			-	36,619.9	-	-	36,619.9		-	7,324.0	-	-	7,324.0	20%
	Total Component C C部分合计			14,420.0	72,519.9	-	-	86,939.9	-	4,456.0	15,187.5	-	-	19,643.5	23%

China

Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 7: Procurement Plan for first 18 months

Mission Dates: 27/04/2020 22/05/2020
Document Date: 12/10/2020
Project No. 2000002359
Report No. 5499-CN

Asia and the Pacific Division
Programme Management Department

Annex: 7, Procurement Plan for First 18 Months

1. A detailed procurement plan covering a period of 18 months is prepared and attached as table 1 (for Civil Works) and table 2 (for Services).
2. The main items of goods to be procured for project are office and technical equipment and furniture. Other goods and materials will be procured following the local shopping (LS) as appropriate. Civil works will involve the improvement of rural infrastructure, including irrigation and drinking water supply facilities and village roads. They will be procured by using NBF and LCB or LS, depending on the nature of expenditure and the estimated value of the related contract. Technical services, training, workshops and studies for the project will be procured by using Direct Contracting or NBF method. .
3. The following Table presents a summary of the procurement methods. Figures in parenthesis are the respective amounts financed by IFAD.

China						
H2RDP Design mission						
Procurement Arrangements	Procurement Method (US\$ '000)			Community Participation in Procurement	N.B.F.	Total
	Local Competitive Bidding	Local Shopping	Direct Contracting			
A. Procurement accounts						
1. works	-	-	-	-	53,569	53,569
2. Smart civil work	12,083 (12,083)	-	-	-	3,302	15,385 (12,083)
3. Equipment & Materials	-	340 (340)	-	-	-	340 (340)
4. Training and workshop	-	4,627 (4,627)	-	-	5,228	9,855 (4,627)
5. Goods, services and inputs	-	-	-	7,352 (7,352)	142	7,494 (7,352)
6. Grants and subsidies	-	-	55,976 (34,509)	-	22,519	78,495 (34,509)
7. Salaries and allowances	-	-	-	-	2,605 (860)	2,605 (860)
8. Operating costs	-	-	-	-	5,194 (427)	5,194 (427)
9. Operations and maintenance	-	-	-	-	36	36
Total	12,083 (12,083)	4,967 (4,967)	55,976 (34,509)	7,352 (7,352)	92,595 (1,288)	172,974 (60,199)

Note: Figures in parenthesis are the respective amounts financed by IFAD

4. Procurement of goods, works and services financed by the project will be carried out in accordance with the Procurement Law of the People's Republic of China (2002) and its amendments to the extent that they are consistent with the provisions of IFAD's Project Procurement Guidelines¹ and Handbook (2010) and its amendments.

¹ IFAD Project Procurement Guidelines -

https://www.ifad.org/documents/38711624/39421027/procure_e.pdf/e1a99511-d57d-4695-a05b-3d9b597d0149.

The procurement methods to be applied, prior review arrangements, and the thresholds for different procurement methods will depend on the expenditure and the estimated value of the contract and will be detailed in the letter to the borrower.

5. Procurement Plan and AWPB should be submitted through the NOTUS ("No Objection Tracking Utility System (NOTUS)" for IFAD's 'No Objection' and tracking purpose. An IFAD Procurement Plan template will be provided to the project management to guide its preparation of the first procurement plan, which shall include as a minimum:

- a. A brief description of each procurement activity to be undertaken during the period by each and every Project Party;
- b. The estimated value of each procurement activity;
- c. The method of procurement or selection to be adopted for each activity; and
- d. A reference to the AWPB;
- e. An indication as to whether the Fund shall carry out prior or post review in respect of each and every procurement activity.

Any amendments to the Procurement Plan shall be processed through NOTUS and be subject to the Fund's 'No Objection'.

6. The following procurement methods are recommended:

i. Works:

- (i) Competitive Bidding: applies to any procurement of works valued over RMB 1,400,000; and
- (ii) Shopping: applies to any procurement of works valued over RMB 140,000 and upto and including RMB 700,000
- (iii) Direct Contracting: applies to any procurement of works valued upto and including RMB 140,000
- (iv) Force Account method: applies to any procurement of works valued below RMB 700,000

ii. Goods

- (i) Competitive Bidding: for contracts valued over RMB 700,000; and
- (ii) National Shopping: applies to contracts valued over RMB 140,000 and upto and including RMB 700,000
- (iii) Direct contracting: applies to any procurement of goods valued below and including RMB 140,000

iii. Procurement of consultancy services, shall be undertaken selected in accordance with any one of the competitive selection methods as per the IFAD

Project Procurement Guidelines and its Project Procurement Handbook as listed below:

- i. Quality and Cost Based Selection (QCBS)
- ii. Fixed Budget Selection (FBS)
- iii. Least Cost Selection (LCS)
- iv. Consultants Qualification Selection (CQS)

7. The standard selection methods could be applied unless otherwise approved. The following processes will apply:

- i. QCBS or FBS or LCS or CQS for procurement valued over RMB140,000
- ii. Single Source Selection (SSS): procurement valued below and including RMB 140,000. All SSS above RMB 140,000 which will only be accepted with due justification and/or in exceptional cases with prior consultation with IFAD.

8. Grant and Subsidy. The project will provide technical and financial support as an incentive to selected cooperatives to stimulate them to establish inclusive and fair relationship with the project target group. Practically, the project will co-finance competitively-selected business plans as a means to efficiently allocate public resources to cooperatives or enterprise-cooperative joint ventures to promote the inclusion of the project target group in sustainable and profitable value chains through mutually beneficial contractual arrangements. The selection of the business plans will be on a competitive basis and will be based on selecting criteria, including: (i) project target group outreach; (ii) definition of fair and sustainable contractual arrangements with the project target group; and (iii) viability and sustainability of the proposal, among other criteria to be elaborated and approved in the Project Implementation Manual. When the BPs are reviewed by a Technical Advisory Group (TAG) and approved, there would be a standard agreement between the project and the company or cooperative that submitted the BP on the financing of the BP. The Project then finances the BPs approved by the County PLG/PMO and the cooperative or companies (as third parties) would undertake the procurement. Such procurements by third parties are not subject to IFAD prior review and they would not be reflected in the project's procurement plan. However, if the amount for reimbursement exceeds the established SOE thresholds, when seeking Withdrawal Application from IFAD the same requirement for supporting document would apply.

9. Standard Bidding Documents & Standard Contract: Standard Bidding Documents are of paramount importance for transparency, efficiency, competitiveness and creation of capacity (standardization of procedures). The project should apply the standard bidding documents adapted for IFAD China Project for all national competitive bidding procurements. Similarly, standard

contracts for procurement of goods and services for the project shall be developed and applied by the Project. The Project will specify the use of these standard documents in the PIM. Once the standard bidding documents from IFAD are made available, the project will then follow those templates.

10. Review of Procurement Decisions by IFAD: In accordance with Section G paragraph 66 of the 2019 IFAD Project Procurement Guidelines, IFAD will undertake to review the provisions for the procurement of good, works and services to ensure that the procurement process is carried out in conformity with the IFAD Project Procurement Guidelines, and the following table defines the prior review required by the Fund:

Procurement Method	Prior² or Post	Comments
Competative Bidding Civil Works	Prior	All procurement costing above RMB 7,000,000, and the 1 st procurement of the county during the first 24 months, and
Competative Bidding Goods and Non Consulting Services	Prior	All procurement costing above RMB RMB 1,400,000
Shopping Goods, Civil Works and Non Consultancy Services	Post	All procurement
Direct Contract for Goods, Civil Work and Non Consultancy Services	Prior	All procurement costing above RMB 140,000
Works by Force Account	Post	All procurement
Quality- and Cost-Based Selection (QCBS), Fixed Budgeted Selection (FBS), Least Cost Selection (LCS) and Consultants Qualification Selection (CQS)	Prior	All procurement valued above RMB 700,000
Sole Source Selection (SSS) and Partnership Agreement with CAAS	Prior	All procurement valued above RMB 140,000
Individual Consultant Selection	Post	All procurement
Competitive Selection Process	Prior	All Business Plan Proposals costing above RMB 2,000,000 of loan resources
Non Competitive Selection (Single Source)	Prior	All Business Plan Proposals costing above RMB 140,000 of loan resources

² All procurement estimated to cost below prior review threshold is subject to post review unless as otherwise stated.

11. The afore mentioned thresholds may be modified by IFAD during the course of Project implementation.

12. To facilitate prior review by IFAD of procurement decisions for the award of any contract for goods, civil works, and consultancy services under the Project by IFAD, the following documents should be submitted in electronic copies through NOTUS, acceptable in Chinese language.

a. Procurement of civil works, goods, and non consultancy service

i. Bid Document

ii. Evaluation Report and Recommendation for Award which includes but not limited to the following details:

- (a) receipt and opening of bids was conducted in accordance with established rules and procedures;
- (b) examination of bids;
- (c) identification and rejection of substantially non-responsive bids;
- (d) correction of arithmetical errors and currency conversion;
- (e) adjustment for non-material deviations;
- (f) evaluation of bids in accordance with the provision of the bid;
- (g) comparison of bids;
- (h) identification of the lowest evaluated responsive bid;
- (i) post-qualification and award recommendation; and

iii. Draft contract and its amendments.

b. Procurement of consultancy services

i. Request for Expression of Interest (REOI)

ii. Request for Proposal (RFP)

iii. Technical evaluation report which includes but limited to the following details:

- (a) description of the main events in the selection process (advertising, establishment of the shortlist, expressions of interest, withdrawals of firms before proposal submissions, delays, complaints from firms, extension of proposal submission date, etc.);
- (b) brief description of meetings and actions taken by the evaluation committee;
- (c) analysis of strengths and weaknesses of each proposal in relation to the evaluation criteria;
- (d) summary of the results of the technical evaluation (including detail of scores);

- (e) annexes detailing technical scores/ranking given to each firm on each evaluation criterion and scores given by each individual member of the evaluation committee;
- (f) award recommendation;

iv. Combined (technical and financial) evaluation report and the recommendation for award which includes but not limited to the following details:

- (a) an account of adjustments made to the prices of the proposals;
 - (b) correction of arithmetic errors;
 - (c) currency conversion;
 - (d) adjustment for nonmaterial deviations;
 - (e) determination of the evaluated price;
 - (f) the award recommendation;
 - (g) an annex with the minutes of the public proposals opening;
- and

v. Minutes of contract negotiations, draft contract, and contract amendments.

13. Grant and Subsidy Business Plan Proposals shall be subject to IFAD prior and post reviews in order to ensure strategic alignment of project implementation with its objectives. Business Plan Proposals that demand for support of project resources exceeding an amount of RMB 2 million shall be subject to IFAD prior review, after County PLG/PMO approval however prior to the signature of the agreement by the parties to the agreement. The documents to be submitted for prior review include:

- a) Detail Business Plan Proposal
- b) TAG review minutes (including among others TAG composition, review process, and recommendation)
- c) The minutes of negotiations and draft negotiated agreement.

14. Requests for IFAD prior review and no objection, should be routed through NOTUS. The No Objection Utility System (NOTUS) as an integrated system in ICP enforces a step-by-step documentation of the workflow for the process for the entire procurement process (expression of interest, IFAD No-Objection, to contract signature) according to the type (e.g. national competitive bidding, international competitive bidding) and object of procurement (e.g. civil works, goods, services). NOTUS also has function as tracking system for non-procurement workflow (e.g. Project Implementation Manual – PIM). The Grant and Subsidy Business Plan Proposals should be submitted through NOTUS as Non Procurement work flow uploading the related supporting documentation.

15. All contracts must be periodically updated in ICP-Contracting Monitoring, which aims to capture contract data related to a project directly from the project source. This data will feed dashboards, which facilitate transparency, efficiencies in project performance monitoring, and enhanced reporting in reference to project financed contracts. The data will also enable projects to generate the contract register as per the requirement of the Loan Disbursement Handbook (LDH).

Table 1: Procurement Plan for first 18 Months (Civil Works)

国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2021 年度项目采购计划汇总表 (工程类) 18 month Procurement Plan (Civil Works)										
采购计划表1/2 PP Table 1/2										
合同编号Contract number	合同内容Contract contents	单位 Unit	估计数量 Amount Estimated	预算成本 (人民币千元) Budget (CNY' 000)	预算成本 (美元千元) Budget (US\$' 000)	采购方式 Procure methods	是否前审 (Y/N) prior review	预计执行期限 Expected execution period	采购组织单位 organization	备注notes
合计Total										
土建类合计Civil works				13,940.42	1,985.81					
A. 气候智能基础设施发展Climate Smart Irrigation Infrastructure										
1. Irrigation facilities 灌溉设施										
AB-GC-21-XXX	灌溉渠道 Irrigation Canal	km 公里	33.8	8,340.55	1,188.11	NCB	Y	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	压力管道 Pressure pipelines	个 set	30	4,030.09	574.09	NCB	Y	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	水源控制系统 Head control and system	个 set	2,003	527.53	75.15	NCB	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	Culverts 管道	亩 mu	26	151.27	21.55	NCB	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	Retaining dam 拦水坝	公里 km	17	516.23	73.54	NCB	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	Aqueduct 引水渠/桥	座 set	7	159.47	22.72	NCB	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	Sluices水闸	公里 km	20	126.63	18.04	NCB	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	Bridges, canal crossing structures 桥涵	套 set	12	88.65	12.63	NCB	N	2021.1 - 2021.12	实施机构 Implementing Agency	
2. Water supply facilities 饮水设施										
AB-GC-21-XXX	Pumping stations 泵站	site 个	6	626	89	LS	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	水塘 Water ponds	site 个	29	2,887.89	411	LS	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	水窖 Water cellar	site 个	25	117.55	17	LS	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-GC-21-XXX	水池 Water pool	site 个	122	4810	685	LS	N	2021.1 - 2021.12	实施机构 Implementing Agency	
3. Drainage ditches				7,815.26	1,113.28					
AB-GC-21-XXX	Drainage ditches 排水沟	公里 km	8.2	2318	330	LS	N	2021.1 - 2021.12	实施机构 Implementing Agency	
工程类采购合计 Works Total										
2. 货物类采购 Goods and Inputs										
AB-HW-21-XXX	孵化中心设备 Facilities for Incubation Center	批 lot	4	987	141	LS	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-HW-21-XXX	天气监测预报的设备 Monitoring and early warning systems for Climate services	套 set	16	1166	166	LS	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-HW-21-XXX	其它农业农村服务的物品投入 Inputs for other rural services	批 lot	10	2026	289	LS	N	2021.1 - 2021.12	实施机构 Implementing Agency	
AB-HW-21-XXX	项目办设备 PMO equipment	套 set	10	2390	340	LS	N	2021.1 - 2021.12	县项目办 CP MO	
备注: 1、工程类合同编码为: AB县-GC-年份+序号(序号为001开始, 依此类推), 例如石门工程第一合同编码为SM-GC-21-001 2、货物类合同编码为: AB县-HW-年份+序号(序号为001开始, 依此类推), 例如石门货物第一合同编码为SM-HW-21-001										

Table 2: Procurement Plan for first 18 Months (Services)

国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2021 年度项目采购计划汇总表 (咨询服务类) 18 month Procurement Plan (Services)							
采购计划表2/2 PP Table 2/2							
合同编号 Contract No.	任务描述 Activities	预算成本 (人民币千元) Budget (CNY' 00)	预算成本 (美元千元) Budget (US\$' 000)	选择方式 Method	Prior Review 是否前审 (Y/N)	合同预期 Executing Period 执行期	组织采购单位 Organizing party
咨询类 Consultancy		7928.00	1129.34				
AB-ZX-21-XXX	孵化中心技术支持 TA for incubation centers	6367.00	906.98	CQS	N	2021.1 - 2021.12	Incubation Center 孵化中心
AB-ZX-21-XXX	孵化中心组织的培训 Training by Incubation Centers		0.00	CQS	N	2021.1 - 2021.12	Incubation Center 孵化中心
AB-ZX-21-XXX	妇女青年创业培训辅导 Coaching/training for youth/women		0.00	CQS	N	2021.1 - 2021.12	Implementing Agency 实施机构
AB-ZX-21-XXX	Climate related TA 天气变化的服务技术援助	292.00	41.60	CQS	N	2021.1 - 2021.12	Implementing Agency 实施机构
AB-ZX-21-XXX	防疫相关的专家服务 TA for Epidemic mitigation measures	273.00	38.89	CQS	N	2021.1 - 2021.12	Implementing Agency 实施机构
AB-ZX-21-XXX	其它服务相关的技术支持 TA for other services	454.00	64.67	CQS	N	2021.1 - 2021.12	Implementing Agency 实施机构
AB-ZX-21-XXX	项目办技术咨询 TA for PMOs	542.00	77.21	CQS	N	2021.1 - 2021.12	县项目办 CPMO
AB-ZX-21-XXX							
服务类 Service		2764.00	393.73			2021.1 - 2021.12	
AB-FW-21-XXX	项目基线调查 Baseline Survey	200.00	28.49	QCBS	Y	2021.1 - 2021.12	省县项目办 PPMO/CPMO
AB-FW-21-XXX	监测评价服务 M&E service	1134.00	161.54	LC	N	2021.1 - 2021.12	县项目办 CPMO
AB-FW-21-XXX	管理信息系统开发MIS Development	800.00	113.96	QCBS	Y	2021.1 - 2021.12	省/县项目办 PPMO/CPMO
AB-FW-21-XXX	地方工作人员培训 Local staff training	240.00	34.19	LC	N	2021.1 - 2021.12	县项目办 CPMO
AB-FW-21-XXX	国内培训 Domestic training	390.00	55.56	LC	N	2021.1 - 2021.12	县项目办 CPMO
AB-FW-21-XXX	国内考察 Domestic Study tour						
AB-FW-21-XXX	妇联相关的能力建设活动 WF related training and and capaticy building	50.00	7.12	LC	N	2021.1 - 2021.12	县项目办/妇联 CPMO/WF
合计Total		10,692.00	1,523.08				
备注: 1、咨询类合同编码为: AB县-ZX-年份+序号(序号为001开始, 依此类推), 例如石门土建第一合同编码为SM-ZX-21-001Note for numbering							
2、服务类合同编码为: AB县-FW-年份+序号(序号为001开始, 依此类推)							

China

Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 8: Project Implementation Manual (PIM)

Mission Dates: 27/04/2020 22/05/2020
Document Date: 12/10/2020
Project No. 2000002359
Report No. 5499-CN

Asia and the Pacific Division
Programme Management Department

DRAFT_PIM

Hunan Rural Revitalization Demonstration
Project (H2RRDP), China

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Currency Equivalents

Weights and Measures

Abbreviations and acronyms

AC	Agriculture Cooperative
ABC	Agriculture Bank of China
ADB	Asian Development Bank
AII	Agricultural Information Institute
AM	Accounting Manual
AWPB	Annual Work Program and Budget
CAAS	China Academy of Agricultural Science
CFI	Corporate Financial Institutions
COSOP	Country Strategic Opportunity Programme
CPMO	County Project Management Office
CYFP	<i>Chanye Fupin (poverty reduction through industry)</i>
CYL	Communist Youth League
DARA	Department of Agriculture and Rural Affairs
DLI	Disbursement-linked indicator
EFA	Economic and Financial Analysis
EIRR	Economic Internal Rate of Return
H2RDP	Hunan Rural Revitalization Demonstration Project
IPAS	Public Sector Accounting Standard
IRF	Integrated Risk Framework
JIMAAPP	Jiangxi Mountainous Areas Agribusiness Promotion Project
KM	Knowledge Management

MARA	Ministry of Agriculture and Rural Affairs
MOF	Ministry of Finance
M&E	Monitoring & Evaluation
MRV	Measuring, Reporting and Verification System
NDRC	National Development and Reform Commission
O&M	Operation & Maintenance
PforR	Program for Results
PMO	Project Management Office
PPMO	Provincial Project Management Office
RBL	Result-based lending
SDG	Sustainable Development Goal
SME	Small and medium enterprises
SSADEP	Shiyan Smallholder Agribusiness Development Project
UNDAF	United Nations Development Assistance Framework
UNSDCF	United Nations Sustainable Development Country Framework
WB	World Bank
Y2RDP	Yunan Rural Revitalization Demonstration Project

Project area map

Chapter 1: Introduction and Background

1.1 Country Context:

1. **China's four decades of economic progress:** The four decades of economic growth since 1978 to 2018 is aligning with china's tremendous efforts of eliminating extreme poverty. Since Deng Xiaoping initiated China's reforms and opening up with his famous speech in 1978, "Emancipate the mind, seeking truth from fact, and unite as one to face the future" until today triggered four decades of reforms that would bring China where it is now: the second largest economy in the world, more than 800 million people escaped poverty. China's share in the world economy rose from 1.5 percent in 1978 to 15 percent today, and per capita income increased 32-fold from 300 dollars in 1978 to 10,100 dollars in 2019. China is one of the few countries that will soon have made the journey from low income country to high income country. China continued strong GDP growth now accounts for one-third of global growth and country has achieved upper middle-income status¹.
2. China under President Xi Jinping entered a new era of development, a needed transition to a more balanced and sustainable growth. Identifying poverty reduction as one of the three critical battles and pledging to eradicating poverty by 2020, President Xi has embarked on economic reforms designed to rebalance from its early focus on domestic infrastructure investment and exports-led economy towards a supply-side structural adjustment and innovation-based model with more domestic consumption and public expenditure in health, education and poverty reduction programs aiming at reducing urban-rural disparities, and rural revitalization.
3. **Covid-19 Economic Impact on China:** According to official figures, China economy shrunk by 6.8% in first quarter of 2020. (during which some 460,000 Chinese firms closed, and 12,000 existing foreign trade enterprises closed down.). While IMF predicted Global Economy will shrink by 3% this year compared to its pre-pandemic prediction of a 3.3% expansion. According to the International Monetary Fund, China alone was expected to account for 39 percent of global economic growth. A 0.5 percentage point reduction in Chinese growth will likely be transmitted and magnified globally. Officially China didn't set any GDP growth target this year after Congress. As premier Li Keqiang announced, the government will for the first time not put a specific economic growth target to instead focus on stabilizing the job market and supply chains, and continuing prioritizing efforts on poverty alleviation.

¹ In February 2018, Chinese government released its 'No. 1 Central Document', traditionally indicator of policy priorities, entitled "Opinions on Implementing the Rural Revitalization Strategy", which draws a road map for rural revitalization, highlighting explicitly a policy statement featuring a strategy that aims to revitalize China's vast rural region.

4. Regarding resilience and rebound of China economy, President quoted: “Our country has the world’s most comprehensive and the largest scale of industrial ecosystem, with a strong manufacturing capability ... [We] have over 100 million businesses, over 170 million educated and trained workers and more than 400 million middle-income earners, making up a huge domestic consumption market in a country of 1.4 billion people”. Being the first country to both experience a Covid-19 outbreak and one of the first that has been successful in containment, China has good opportunities to make for the loss during the rest of the year particularly on domestic tourism and health related exports.
5. **China’s rising inequality and disparities remain a challenge.** Official government estimates indicate a similarly sharp and prolonged decline in the number of poor, and that the number of rural poor had declined to about 5.51 million by end of 2019 using international poverty line of US\$1.90 a day. With reference to higher international poverty lines, a relatively large number of people continued to live in moderate poverty and were vulnerable to poverty shocks. There were 95.5 million people below the “lower middle income” poverty line of US\$3.20 a day (in terms of purchasing power parity) and 373.1 million people below the “upper middle income” line of US\$5.50 a day. Most important is the need to address inequality, which is relatively high, with a Gini coefficient of 0.465 in 2019 (NBS).
6. **Geography explains much of the inequality in China.** Several studies indicate that disparities between urban and rural areas represent the largest share of total inequality. Unequal access to infrastructure and municipal services, which is associated with rural-urban disparity, is a significant contributor to overall inequality. Disparities between coastal and inland provinces are also high. Substantial state-led investments in the interior provinces have reduced the income gap in recent years but at the cost of capital misallocation, which is increasingly evident. The challenge to create sustainable income opportunities in the interior provinces thus remains.
7. **Demographic transition and aging population another looming challenge to China socio-economic sustainability.** The widening urban-rural population gap and ageing population are becoming new challenges for China to meet social security and keep agriculture labour force intact which are backbone of china food security depending on 250 million small farm holders. Today about 42 percent of the Chinese population are registered in rural areas, which is predicted to be down to 31% by 2030. Between 1950 and 2015, the total fertility rate per woman declined from 6.11 to 1.6. over the same time, the overall mortality rate also declined significantly resulting in a steady increase in life expectancy. In addition, due to large scale rural labor migration, China rural and agriculture feminization and aging became a common phenomenon
8. **The poverty context:** Continued high economic growth paid great dividend to well-being of Chinese people. The number of rural poor had declined to about 5.51 million by end of 2019 with poverty incidence drop to 0.6%. The authorities are confident that impact of Covid-19 will not impede achieving this milestone of eradicating the extreme

poverty by end of 2020. The government of China is likely to eradicate extreme rural poverty, measured against the prevailing national poverty standards (i.e. approximately US\$1.90/day), by 2020 - making China the first developing country to achieve SDG1, ten years ahead of the global target. However, sustaining this achievement, reducing inequalities (between coastal and western provinces, urban and rural areas, and among population i.e. relative poverty), and avoiding that the people moved out of poverty fall back into poverty will remain priorities for the government in the years following 2020.

9. **The rural development context.** Nearly 600 million Chinese, about 40 percent of the population, still live in rural communities. China is going through a fundamental transformation in rural areas. Over the past decades, China has experienced a massive migration of the active workforce from the rural to the urban areas due to the gap between the urban and rural salaries and the limited income-generating opportunities in the rural areas. Rural villages today are characterized by a population which mainly comprises elderly, some middle generation women taking care of the elderly parents (the so-called “left-behind women”, who represent about 60% of the labour force in rural areas), young children, and sick and/or people with disabilities. Rural families from poverty vulnerable households are often dependent on the remittances provided by migrant worker family members, complemented by some income from production and local labour. The contribution of agriculture to the rural household income is reducing (an estimated 10-20 percent in poor rural areas, less than 10 percent nationally), and income-generating opportunities are in "adding-value", not in production. Today, about 40% of the population is registered in rural areas. This percentage is expected to drop to 31% by 2030, furthering the urban-rural divide, unless measures are taken to economically develop the rural areas. During the Covid-19 lockdown, nearly 200 million migrant workers left for their homes (there are roughly 250 million migrant workers in china and some 80% were affected by covid-19) and remained out of jobs for nearly three months. Though government has set a fund to assist these migrant workers with some cash/subsidies, the overall impact on rural household income will be far reaching, and yet to be assessed, as 45% of rural household income comes from these migrant workers.
10. **The government’s ‘Rural Revitalization Strategy’:** In response to this prevailing situation, the government has recently coined a "rural revitalization" strategy (2017), a long-term, comprehensive strategy which aims at rebalancing the existing divide between urban and rural areas by accelerating the development of rural areas and making them attractive for living. Key strategies for pursuing and sustaining poverty reduction efforts and developing rural areas include: agricultural "industrialization" (i.e. the development of lead "industries" through the support of agro-enterprises and cooperatives), creation of employment opportunities, and comprehensive infrastructure development - among other strategies.
11. **Provincial Context:** Hunan has consistently been a priority area of the Chinese government’s poverty reduction program given it hosts a large share of poor people in the country (7.6 percent of the national poor in 2017). In 2017, 40 out of 122 counties

were categorized as nationally designated poor counties. The average income per capita of the rural poor of Hunan is 30 percent less than the average income of the province. Though absolute poverty will likely be eradicated by 2020, the risk of transitional poverty and vulnerability will remain high due to limited income opportunities.

12. With 2.21% of the national territory and about 3% of the national cultivated land, about 5% Chinese citizen live in Hunan Province (69 million) with 57% urban dwellers. There are 13 municipalities, one minority autonomous prefecture and 122 counties/districts in Hunan Province, of which, 20 are nationally designated poverty counties. Among fourteen contiguous poverty blocks, Hunan shares two of them – Wulin mountain area and Luoxiao mountain area with 37 counties. Thus, 40 counties are categorized as poor counties at national level, which took about 5% of that in China. Besides, there are 11 provincial-designated poverty counties. Simultaneously with the poverty reduction achievement in China, poor population in Hunan reduced 10 million from 2010 to 0.2 million in 2019, while poverty incidence decreased from 17.9% to 0.36% accordingly, and 31 poor counties “took off the hat” of poverty until 2018. The objective of Targeted Poverty Alleviation Program in Hunan is that all poor counties will "take off the hat" at the end of 2020. In 2019, the average income per capita in poor area of Hunan was CNY 10,912². Although absolute poverty will be eradicated in these counties by 2020, many rural households will remain vulnerable and with limited income opportunities.
13. The Covid-19 outbreak experienced in the first quarter of 2020 resulted in major disruptions of agri-food systems, including the temporary shut-down of wet markets, animal feed factories, wildlife breeding facilities, and disruption of transport systems. Farmers were not able to access feed supply and had to cull animals. The COVID-19 outbreak and some of the control measures, such as social distancing and mass quarantine, have also adversely impacted the food product supply chains in Hunan.

1.2 Situation analysis of China regarding IFAD’s corporate mainstreaming priorities:

1.2.1 Gender and social inclusion

14. Feminization of rural population and of the work force are becoming common phenomenon in rural China. Due to mass migration of male workers to urban and eastern centers, women contribute 81 percent of the rural labour force, compare to 58 percent for men. The majority are engaged in agriculture. However, women have usually less control over inputs and rural credit. Moreover, the share of women in post-production business activities is almost negligible. As of end-2015, women comprised about half of the 56 million rural poor population in China.³ According to State

² Summary of Hunnan Poverty Alleviation Office.

³ X.L. Wang and R. Gao. Poverty Reduction of Rural Women: Objective, Challenge and Policy Option. Collection of Women’s Studies, No. 6 Ser. No. 138, Nov. 2016. Pages 5-8.

Statistic Bureau survey in the nationally designated poor counties, the degree of poverty was greater among women than among men. In 2010, women's poverty incidence was 9.8% while men's was 9.4%, and the incidence of low-income women was 0.6 percentage points higher than that of men. Rural women's average level of education in Midwestern China was 6.8 years, which was 0.8 years less than those in Eastern China.

15. The majority of labor force of female is engaged in agriculture, about 80.6%, mostly in primary industry as compared to 58.8% of male labor in 2017⁴. According to National Bureau of Statistics of China, the education level of female labor in poor area was far behind that of male labor (Table).

Table:1 Education level of Female/Male labor in poor area of China

Education level	Female labor (%)	Male labor (%)
No school	11.9	3.7
Primary school	39.4	29.0
Middle school	40.4	51.7
High school	5.9	11.5
College and above	2.4	4.1

Source: Poverty Monitoring Report of Rural China 2018.

16. Despite the fact women are the main source of rural labour force, their representation in leading cooperatives is below 9 percent, while percentage of women led enterprises is only 9 percent, and women led family farming is about 37 percent. The project will contribute to empower women in the rural economy by (i) creating new employment opportunities, with a priority on women, in the project area; (ii) providing business services and stimulating women entrepreneurship potential and capacities (Ref. Sub-component A.2); and (iii) enhancing the participation of women farmer in imparting on-farm/off-farm skills training in professional farmer program (Ref. Sub-component A.3).

1.2.2 Ethnic Minority and Poverty

17. There are fifty-five ethnic minorities in China and the province of Hunan has about 10% of ethnic population in the province. The main provinces home to ethnic minorities are eight western provinces including Inner Mongolia, Guangxi, Guizhou,

⁴ Department of Household Surveys, National Bureau of Statistics of China. Poverty Monitoring Report of Rural China (2018). China Statistic Press, Dec. 2018.

Hunan, Tibet, Qinghai, Ningxia and Xinjiang named Eight Minority Province/Autonomous Region (*Minzu Bashengqu*). According to National Ethnic Affairs Commission, there were 421 minority autonomous counties among 832 nationally designated poor county, accounting 51%. Similarly eleven of fourteen contiguous poverty blocks (*Sanqu Sanzhou*) are located in the key minority area. The poverty incidence of key minority area has been remained higher than the national average, and the share of key minority area in country poor population increased 3.5 percentage point between 2010 to 2017⁵ .

Table 2: Poverty Situation of Key Minority Area (2010-2017)

Year	Country poverty incidence	Poverty incidence of eight minority provinces	% of minority in poor population
2010	17.2%	34.5%	30.4%
2011	12.7%	26.5%	32.0%
2012	10.2%	21.1%	31.5%
2013	8.5%	17.1%	31.1%
2014	7.2%	14.7%	31.4%
2015	5.7%	12.1%	32.5%
2016	4.5%	9.3%	32.5%
2017	3.1%	6.9%	33.9%

Source: National Bureau of Statistics

18. According to researcher Wang, Causes of poverty min ethnic minorities included, (a) slow reach out of benefits to poor and minorities from macro-economic development; (b) constraints due to poor natural and ecological conditions, and (c) difficulty in adapting modernization and marketization due to minorities livelihood culture and traditions.⁶

⁵ National Ethnic Affairs Commission. Poverty Monitoring Result of Minority Area (2017).

<http://www.gov.cn/xinwen/2018-08/15/5313944/files/a0182850dccb49998471b5b3d584c279.pdf>

⁶ Wang, SG., et al. Trend, Causes and Strategies to Minority Poverty. Guizhou Social Science. Vol 276, No. 12, December 2012. 85-90

1.2.3 Rural Youth

19. Overall in China the youth unemployment has remained under 10 percent for the last three decades, mainly thanks to the effects of the rural-urban migration, whereas about 250 million youth migrated to urban centers to find employment opportunities. In the project counties, about 60 percent of youth are migrant labour. Presently, China doesn't have an explicitly written, unified national youth policy or official executive mechanism for carrying out and monitoring national or regional youth affairs. Youth policy is regarded as a component of the overall policy of the CPC which is ideologically oriented and politically dominated. Communist Youth League (CYL), the sole national organisation managing youth affairs in China, focuses its efforts on young people between 14 and 28 years. The literacy rate among youth is 99% in both sexes. Over last three decades the youth unemployment remained average of 9 to 10%.
20. Since 1980s when China economic reform started, rural labor has been being migrated to urban on a large scale majorly due to the income gap between rural and urban. According to NBS, there was 179.69 million rural labor migrated to urban by 2017⁷. The rural labor under 40 years old was the majority of the labor migration, and 66% of them migrated to eastern China⁸. With such big scale rural labor migration, China rural and agriculture feminization and aging became a common phenomenon.
21. In September 2018, central government issued “Strategy Planning for Rural Revitalization (2018-2022)”, to promote rural revitalization of industry, human resource, culture, ecology and organization. Obviously, rural youth is the key human resource for rural revitalization, and achievement of rural revitalization will create opportunity to pull youth back to rural.
22. The proposed project would focus on fostering local youth, facilitating migrated youth back to rural by giving them business startup ideas and opportunities. In addition, the project would also support the Chinese government ‘Mass Rural Youth Volunteer Program’, which would facilitate sending over ten million of young volunteers from large cities to rural areas⁹.

⁷ National Bureau of Statistics.

<http://data.stats.gov.cn/search.htm?s=2017%20%E5%85%A8%E5%9B%BD%20%E5%A4%96%E5%87%BA%E5%8A%A1%E5%B7%A5%E5%8A%B3%E5%8A%A8%E5%8A%9B>

⁸ Xu Xiaohua, et al. The Trend Forecast and Management of the Chinese Agricultural Surplus Labor Transfer During 2014 —2030. *Management Review*, Vol. 30, No. 1, Jan. 2018. 221-229

⁹ Update on Key Developments in China, April 2019.

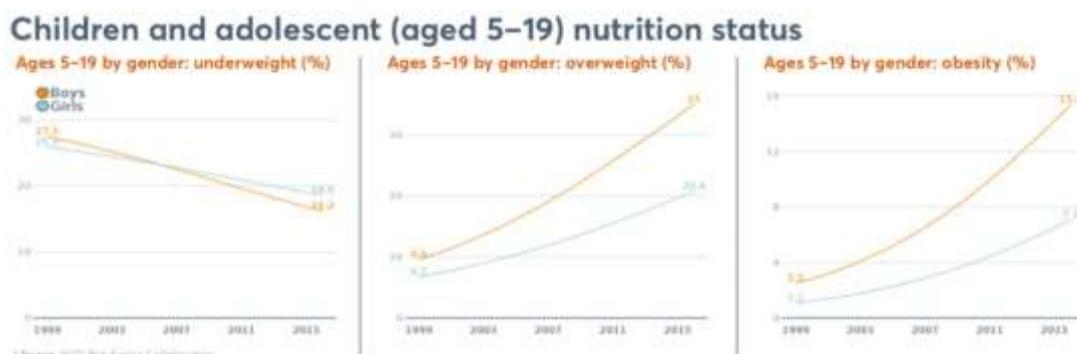
1.2.4 Nutrition Situation Analysis

23. China has made significant progress in improving the food security and nutritional status of its people. Prevalence of undernourishment decreased from 24 percent in 1992 to 9 percent in 2016. Malnutrition prevalence in children under 5 years decreased from 38 percent to 9 percent (measured as height for age) and from 19 percent to 3 percent (weight for age) in the period 1987-2010. Stunting, underweight, and wasting among children under 5 years were 8 percent, 2 percent and 2 percent respectively in 2013..

Rates of child malnutrition are also dropping. From 1990 to 2010, the number of underweight children under 5 fell by 74 percent and rates of stunting dropped by 70 percent. Current levels are lower than most other developing countries.

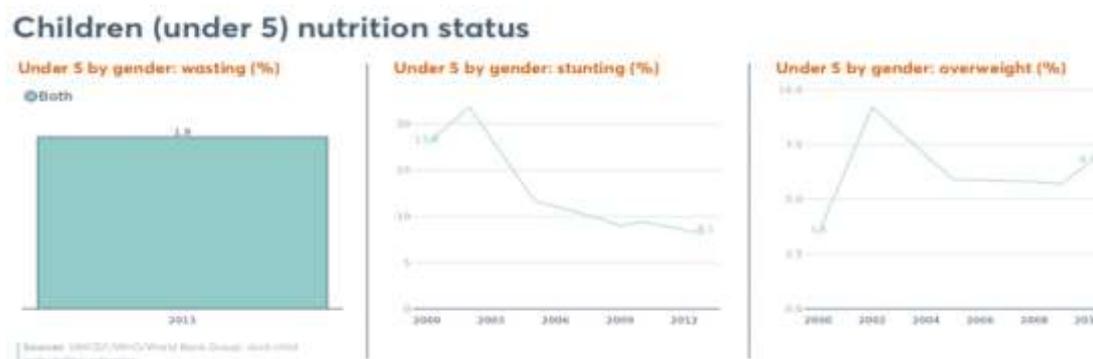
24. Similarly the nutrition status of children and adolescent aged 5-19 has improved remarkably over the last 15 years as shown in graph below where the underweight reduced to 17% in year 2015 from 27% in 1999. However the overweight and obesity has greatly worsened over the same period for same population group.

Source: WHO World Health Report, 2017



Source: WHO World Health Report, 2017

25. According to WHO World Health Report 2017, (having data from 2013) the prevalence of stunting, underweight and wasting among children under 5 were 8.1%, 2.4%, and 1.9% in the overall China showing great achievement in nutrition.



Source: WHO World Health Report, 2017

26. Better nutrition has significantly improved the health and quality of life of Chinese children. Mortality in under 5s due to malnutrition dropped from 22 to 13 percent between 2000 and 2010. Meanwhile The food supply has also improved remarkably, and undernourishment of population reduced from 16% in 2000 to 9% in 2016. But overweight and obesity are becoming prominent in cities, and gradually appearing in rural areas: 23 percent of boys and 14 percent of girls under 20 were now found to be overweight or obese. The health and nutrition improvement in china population is also resulted from improved drinking water coverage and improved sanitation coverage. China's value in the Global Hunger Index fell from 25.1 in 1990 (serious hunger level), to 7.6 in 2018 (low hunger level).

1.3 Provincial Context (Hunan)

27. **Province of Hunan** is currently home to 3.6% of China poor population, though once hosted 8% a decade ago. It has consistently been a priority area of the Chinese government's poverty reduction program. Hunan is located in the transition zone from Yunnan-Guizhou Plateau to the hills of south Yangtzi River, and from Nanling Mountains to Jiangnan Plain. With 2.21% of the national territory and about 3% of the national cultivated land, about 5% Chinese citizen live in Hunan Province (69 million) with 57% urban dwellers. There are 13 municipalities, one minority autonomous prefecture and 122 counties/districts in Hunan Province, of which, 20 are nationally designated poverty counties. Among fourteen contiguous poverty blocks, Hunan shares two of them – Wulin mountain area and Luoxiao mountain area with 37 counties. Thus, 40 counties are categorized as poor counties at national level, which took about 5% of that in China. Besides, there are 11 provincial-designated poverty counties. Simultaneously with the poverty reduction achievement in China, poor population in Hunan reduced 10 million from 2010 to 0.2 million in 2019, while poverty incidence decreased from 17.9% to 0.36% accordingly, and 31 poor counties “took off the hat” of poverty until 2018; the objective of Targeted Poverty Alleviation Program in Hunan is that all poor counties will "took off the hat" at the end of 2020. In 2019, the average income per capita in poor area of Hunan was CNY 10,912¹⁰. Although absolute poverty will be eradicated in these counties by 2020, many rural households will remain vulnerable and with limited income opportunities.

Table 3: Poor Population of Hunan in China (2010-2019)^{11, 12}

Year	Number of Rural Poor in Hunan	Poverty incidence %	% of Hunan rural poor in China
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¹⁰ Summary of Hunnan Poverty Alleviation Office.

¹¹ Department of Household Surveys, National Bureau of Statistics of China. Poverty Monitoring Report of Rural China (2018). China Statistic Press, Dec. 2018.

¹² <http://fpzg.cpad.gov.cn/429463/429470/429490/index.html>

	(million)		
2010	10.06	17.9%	6.07%
2011	9.08	16.0%	7.42%
2012	7.67	13.5%	7.75%
2013	6.40	11.20%	7.76%
2014	5.32	9.30%	7.58%
2015	4.34	7.60%	7.78%
2016	3.43	6.00%	7.91%
2017	2.32	4.10%	7.62%
2018	0.83	1.49%	5.00%
2019	0.2	0.36%	3.63%

Source: Hunan Poverty Alleviation Office.

1.4 Situation Analysis of Project Area regarding IFAD's corporate mainstreaming priorities

1.4.1 Gender Analysis of Project Area

Hunan has 49.6% share of women from its total 69 million population (2018). Among them, 3.08 million women are living in the project counties and about 0.115 million in the targeted project area.

Table 4: Demographics of women in project area and project counties (2018)

County	Project county		Project area	
	Pop.	%	Pop.	%
Shimen	324,144	48.61%	7,985	44.82%
Taoyuan	470,905	48.61%	9,136	48.82%
Guzhang	69,014	47.63%	6,988	41.58%
Fenghuang	201,596	46.87%	7,330	37.25%
Luxi	152,673	48.16%	14,442	45.42%
Longshan	321,391	53.00%	7,741	47.56%
Shaodong	629,285	54.82%	24,102	47.29%
Daxiang	169,008	48.00%	7,185	46.99%
Longhui	539,202	47.11%	16,592	41.93%
Rucheng	202,906	48.04%	13,249	46.93%
Total	3,080,124	49.67%	114,750	44.97%

Data source: CPMOs.

28. **Decision making in household and community.** Though the feminization of rural and agriculture in China” is a public well-known term referring to the consequence of significant rural-urban labor migrants, yet women are not leading in decision making at household and community level. Most women still cultivate the land under their husbands’ name due to the practice of traditional marriage pattern where men are registered as family head. Therefore, women with formal household head title accounts only 15.51% in project counties and 12.32% in project area. The figures dramatically differed county by county with lower than 10% in majority of counties, but extremely high in Longshan, Shaodong and Daxing counties. Field visits in three villages showed that women are main labor force in all agricultural activities, and Women’s Federation (WF) at county level also support the view.
29. Following the common practice of official and uniform administration system in China, most affairs at the community level are officially managed by villagers’ committees in administrative villages with village committee head where men are the major decision makers at all levels. The women village leadership in the project counties accounts only 10.08. According to “Hunan Women Development Plan (2016-2020)”, one of the objectives was that women would take 6% of village head and 30% of village committee members¹³.
30. **Labour Division:** Though most of the rural male labors are engaged in migrated works, men in rural areas generally play the key role in transactions and heavy manual work, while women take care of daily farming activities that require less manual labour but are more constant and time consuming. Often women end up the main labour for farming activities due to migration of men. The overall women labour force in project counties are about 46% whereas almost 60% accounts in village agriculture labour force. Differentiating with rural China elsewhere, the percentage of female labor with high school education accounted more than 1/3 in both project counties and project area, which is higher than the average level of labor force with high school education.
31. **Women’s Access to Technology.** Hunan Agro-Technical Extension Stations at county and township levels are the main technical service providers in province. According to CPMOs calculations in 10 project counties, only 10.9% rural labors were trained by the government extension system in 2018 in project area. However, 46% trainees were women, and 31.51% were ethnic minorities. As evidenced from the field visits, there is a serious shortage of human resources for such extension services in the project counties and project area. Each technician is covering hundreds of households on average. Furthermore, women do not represent an appropriate share of the technical extension system staff accounting less than 20% in project area.
32. **Women’s participation in New Economic Entities.** There are about 6,091 cooperatives (% in project area), 1,111 business enterprises (2.61% in project area) and 3,451 family farming (4% in project area) in 10 project counties mostly led by men and

¹³ Hunan Women Development Plan (2016–2020). http://www.nwccw.gov.cn/2017-05/25/content_158511.htm

dominated by male members despite the fact that key labor force in the project area is dominated by women. Only 16% of cooperatives, 31% of enterprises and 66% of family farming is led by women in project area. Besides cultural reason, membership of women who is not registered as household head, would cause the difficulty to the cooperative when dealing with different agencies for cooperative establishment and operation, as the agencies require the membership consistent with household head. Nevertheless, field visit of the mission found that women are keen to play significant role in the cooperative.

Table 5: Women’s participation in new economic entities (2018)

County	% of women-led Coop. Among all		% of women’s membership in Coop.		% of women-led enterprise		% of women-led family farm	
	Project county	Project area	Project county	Project area	Project county	Project area	Project county	Project area
Shimen	7.98%	6.49%	6.72%	10.75%	1.79%	100.00%	9.52%	NA
Taoyuan	0.21%	0.49%	32.32%	32.14%	NA	NA	10.53%	NA
Guzhang	58.97%	18.87%	30.00%	45.01%	NA	NA	65.00%	33.33%
Fenghuang	6.16%	51.30%	17.56%	23.05%	NA	NA	NA	16.67%
Luxi	11.97%	17.14%	31.36%	21.28%	NA	NA	14.29%	28.57%
Longshan	20.17%	94.26%	52.99%	41.36%	8.00%	NA	17.95%	NA
Shaodong	2.54%	0.77%	29.91%	36.28%	3.11%	NA	15.39%	NA
Daxiang	7.26%	0.73%	30.00%	43.24%	9.30%	NA	7.41%	NA
Longhui	2.43%	11.32%	34.20%	34.20%	8.64%	14.29%	23.76%	18.18%
Rucheng	11.47%	5.23%	79.56%	60.18%	2.31%	28.57%	21.63%	43.68%
average	7.20%	16.45%	37.47%	33.91%	3.79%	31.25%	18.07%	66.41%

Data source: CPMOs.

33. **Women’s organization.** Women’s Federation is dominant organization all over china as well in Hunan and in project area. Hunan Women’s Federation (HWF) is the dominant women’s organization in the Province and playing important role in gender mainstreaming and empowerment in project area. HWF is catering for all ethnic with aim to create a bridge between women and government while making important decisions for safeguarding women’s rights, and promoting gender equality. HWF has offices and representatives at the provincial, prefecture and county levels, and has very strong linkages down to the grassroots levels with representatives in townships and administrative villages. Since 2016, under the reform arrangement of ACWF, HWF has expanded its organization structure from a representative to the federation with elected members of 40 at county level, 28 at township level and 18 at village level. Consequently, HWF has stronger linkages with grass root women, and women’s mobility in the project area is ensured.

34. Corresponding to the government poverty alleviation policies, HWF promoted poverty alleviation for rural women through following approaches, (a) Disseminating the government policies and experience of good practice; (b) Providing training on production and business skills; (c) Facilitating application of credit and business operation; (d) Promoting development of women's handicraft based on minority tradition; (e) Establishing platform for employment opportunity; (f) Mobilizing resources for women and children's healthcare.
35. Among others at county level, Guzhang WF linked township and village WF members with left-behind women of migrant husband, and supported women-led cooperative by mobilizing government fund; Taoyuan WF actively mobilized rural women participated the skill trainings by different agencies, provided recruitment information to rural women, and mobilized the donation to buy the health insurance for registered poor women.

1.4.2 Youth in the Project Area

36. Communist Youth League (CYL) is the most extensive youth organization in the province and at the county level that positioned itself as the sole organization systematically serving for youth development widely on youth ideology and morality, youth education, youth health, youth career-orientation and employment, youth social inclusion and participation and youth social security
37. About 67% of the workforce in the project area is engaged in migrant labour due to less attractive career opportunities in local area. To revert this trend, a central pillar of the new rural revitalization strategy focuses on creating new employment opportunities in the rural areas to retain or attract back the active population to the rural areas [1], particularly young people. The project will contribute to this objective by (i) providing incentives and support to entrepreneurs and investors (particularly young and - considering women represent the majority of the workforce in the rural areas - women) to start their own business in the project area (Ref. Sub-component A.2); and (ii) facilitating women participation in supported cooperatives, including leading roles (Ref. Sub-component A.1).
38. In 2019, Central Committee of CYL initiated "Program of Supporting 0.1 Million Youth to Start Business in Poor Area". In which, Hunan CYL will support 5,000 youth starting up business in all 40 national-designated counties through business training, credit access, mentor coaching, business development support, follow-up service, etc. And expected to involve 30,000 registered poor benefiting income increase through these businesses.

1.4.3 Ethnic Minorities in Project Area

39. Hunan hosts 10% of province population as ethnic minorities with Tujian and Miao the dominant ethnic minorities. The province is widely known for its cultural diversity in China. The ethnic minorities are mostly concentrated in Western and southern Hunan¹⁴. Xiangxi (western Hunan) is the only minority autonomous prefecture in Hunan Province, and minority (dominated by Tujia and Miao) population made up more than 80% in the prefecture. Xiangxi is also the key target of poverty alleviation in Hunan Province. All seven counties of the prefecture -- Luxi, Fenghuang, Huayuan, Baojing, Guzhang, Yongshun and Longshan are national-designated poor counties, and the only municipality -- Jishou is provincial-designated poor. Four of seven poor counties were comes under project target area.
40. Five of ten project counties are minority inhabit area. Situated in Xiangxi Tujia and Miao Autonomous Prefecture, Luxi, Fenghuang, Guzhang and Longshan are the main settlement area for Tujia and Miao in China, and the minorities composed big proportion of the population. Besides, Shimen is a concentrated area of Tujia, where Tujia made up more than half of the population according to the county government. In addition, There was more than 17% of minority population (mainly Yao and She) in three minority townships and 44 minority villages in Rucheng.

Table 6: Minority situation in project area and project counties (2018)

County	% of minority population		Main minorities
	Project county	Project area	
Shimen	58.10%	28.63%	Tujia, Bai, Miao, Hui, Zhuang, Uygur
Taoyuan	3.29%	0.55%	Bai, Miao, Hui, Zhuang, Tujia, Uygur, Man, Dong, Yao
Guzhang	86.00%	80.08%	Tujia, Miao, Hui
Fenghuang	79.30%	89.90%	Bai, Yi, Miao, Hui
Luxi	62.28%	65.51%	Bai, Miao, Hui, Tujia, Dong
Longshan	81.00%	81.08%	Bai, Miao, Hui, Tujia
Shaodong	0.57%	0.79%	Bai, Yi, Miao, Hui, Lisu, Naxi, Dai
Daxiang	1.98%	NA	Hui
Longhui	2.24%	3.15%	Tujia, Miao, Hui
Rucheng	17.65%	19.76%	Yao, She
average	27.21%	30.42%	

Data source:CPMOs.

¹⁴ Ethnic Minorities in Hunan. <http://www.hunan.gov.cn/jxxx/hngk/rkmz/rkmz.html>

41. These minority are now without traditional institutions and are in general well integrated in the existing socio-economic context. They have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have no distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and not well developed areas. Government policies targeting rural poor and vulnerable households in Hunan province do not differentiate based on ethnicity, but target based on poverty indicators. The project engagement approach with pro-poor cooperatives and agro-businesses will be based on informed consultations to ensure that particular livelihood strategies of the different ethnic groups are taken into account, where existing. Even though an FPIC agreement will not be signed, since there are no traditional institutions and authorities to provide for a such signature, FPIC principles will as such be followed in the planning and formulation of project interventions.

1.4.4 Nutrition in Project Area

42. As said earlier, with high economic growth complementing with enormous progress in poverty reduction over the past forty years, China has made significant progress in improving the food security and nutritional status of its people.
43. In 2016, Hunan Provincial Government issued “Hunan Children Development Plan (2016-2020)”, in which, the objectives of children’s nutrition included: (a) Rate of low birth weight will be controlled under 4%; (b) Exclusive breastfeeding rate for infants under six months will achieve 50%; (c) Anemia prevalence of children under age five will be controlled under 12%, and reduce the anemia prevalence of students in primary and secondary schools; (d) Stunting Prevalence of children under age five will be controlled under 7%; and (e) Obesity rate of children under age five will be controlled under 3%¹⁵. The current data shows that province has achieved all targets of, prevalence of severe malnutrition, prevalence of moderate to severe anemia, and anemia prevalence of primary and secondary students, set in the development plan.
44. According to Shaodong Maternal and Child Care Service Center, the health of 90.97% children under age seven were monitored through annual health examination in kindergarten in 2018, and the prevalence of anemia, stunting, underweight, wasting and overweight among children under 5 were reported 2.05%, 0.16%, 0.78%, 0.07% and 0.42%. The health survey found that the children with labor migrant parents had slightly higher rate of health problem on stunting, wasting and short-sightedness. One reason stated by a staff of Shimen Maternal and Child Care Service Center, was that these children are normally raised by grand parents, a common phenomenon in rural

¹⁵ Hunan Children Development Plan (2016-2020). http://www.nwccw.gov.cn/2017-05/25/content_158510.htm

area, who lacks knowledge on nutrition and more prone to traditional knowledge of raising children.

45. Though the figures are still slightly higher than those of urban area, yet such great improvement is driven by the national programs of health management for children under 6 and publicity of breastfeeding and reasonable complementary foods since 2009, and children nutrition improvement project in poor rural area in recent years.
46. “Hunan Women Development Plan (2016-2020)” required strong advocacy on health and nutrition knowledge, provided specific nutrition guidance and intervention to pregnant women and breastfeeding women¹⁶. Under the program, a pregnant woman school is established in every township health care center, which provides free training and health examination to every pregnant woman through the coordination of village Women’s Federation Chair. Even the exclusive breastfeeding rate within the first 6 months of life reached 66.24% in Shaodong in 2018. However, awareness is still the key challenge for pregnant women in the project area. A large number of pregnant women did not attend the training or health examination because of no physical discomfort, and most of them did not apply the food guidance and still believe eating more food during pregnancies are better for child and mother.

1.5 Climate Change:

47. China has witnessed an average atmospheric temperature increase by 0.91 degree Celsius in the past 100 years. With the continued intensification of climate change, the occurrence of extreme weather events and natural disasters will continue to increase as per historical data. As poverty areas often coincide with climate and ecologically vulnerable areas, the effects of climate change will have a higher impact on rural, marginalized and natural resource-dependent households, who have higher exposure and lower adaptive capacity - increasing their overall vulnerability. The climate conditions in the ten project counties are suitable to agricultural production. The degree of climate risk in the project areas is considered not high, and vulnerability to the effects of climate change is considered moderate. However, considering the different agriculture industry characteristics in each county, some commodities may need more attention for climate adaptation compared to others.
48. The average annual precipitation ranges from 1200 mm to 1,500 mm. The rainfall mainly occurred from April to August, which accounted for 63% of total precipitation of the whole year. Rainfall in spring and summer occupied 36% and 35% of the annual precipitation while 17% and 12% in autumn and winter. Due to uneven rainfall distribution within the year and between years, seasonal water shortage and droughts are a common phenomenon. Shaodong county, Longhui county and Daxiang county,

¹⁶ Hunan Women Development Plan (2016-2020). http://www.nwccw.gov.cn/2017-05/25/content_158511.htm

which are located in the drought corridor of Heng-Shao¹⁷, are more seriously short of water. According to the meteorological monitoring data from the past 50 years (1960 to 2010), mean temperature in Hunan province increased at a rate of 0.153°C per 10 year¹⁸. The future projections forecast that mean temperatures in the project area would further increase, and seasonal precipitation variation would also increase, with a decrease in precipitations in spring and autumn, and an increase in summer. Some areas would likely experience longer dry period, more rainy days in wet season, as well as increased number of frozen days during winter. The increased frequency and intensified extreme weather events would likely cause more seasonal droughts and floods, with an impact on soil erosion. It is observed that small scale agrometeorological disasters are common across the region, while serious disasters rarely occur. Aside from that, most of the negative impacts from such events are minimalized or mitigated through preventive measures, and the community also has strong resilience capacity post disasters. The project will contribute to further enhance the resilience capacity and reduce the risks and impacts associated to the changing of weather and climate conditions, in particular increase in variability and unpredictability, by strengthening the capacity of the government and beneficiaries to assess climate risks, plan and make decision accordingly, as well as improving the climate-resilience of the infrastructure system. (Ref. Sub-Component B.1 and B.2)

Chapter 2: Project Summary

2.1: Goals and Objectives

49. **Project goal and development objective:** The project goal is to ‘maintain poor and vulnerable households out of extreme poverty and increasing their production and economic resilience’. The development objective is to ‘Improve income-generating opportunities for vulnerable rural people, particularly youth and women, increasing the inclusiveness of the benefit-sharing mechanisms from private sector linkages, and increasing the resilience of the rural population to climate change impacts.’.
50. This will be achieved by (i) strengthening and providing incentives to New Economic Entities to include poor households among their members, and introduce fair shareholding and benefit-sharing mechanisms (Ref. Sub-component A.1); (ii)

¹⁷ Heng Shao Drought Corridor Comprehensive Management Plan. Hunan Provincial Development and Reform Commission, Hunan Water Resources Department, August 2012

¹⁸ Liao Yufang, Peng Jiadog, Cui **Wei**. Response analysis of Hunan agricultural climate resources to global climate change, Chinese Agricultural Science Bulletin, 2012, 28(08):287-293

stimulating additional and more diversified income opportunities, particularly for young and women, in the project area, by providing business services and stimulating and strengthening entrepreneurship opportunities and capacities (Ref. Sub-component A.2 and A.3); and (iii) addressing some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities (Ref. Component B). Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options - and plan and decide accordingly, and improving the climate-resilience of the infrastructure system.

51. **Key indicators:** The impact of the project would be measured through the following key indicators: (i) increase in households' income; (ii) increase in NEEs' profits; (iii) increase in number of youth/women-led enterprises; (iv) increase in number of youth/women start-ups; (v) increase in number of farmer professional cooperatives that improved their operational standards; (vi) increase in number of households adopting environmentally sustainable and climate resilient practices; (vii) increase in number of households who report reduced water shortages; and (viii) number of policies completed - among other indicators (Ref. Annex I - Logframe). Indicators will be disaggregated by gender, age, and ethnic group, when relevant.
52. **Disbursement-linked indicator:** Since sub-component A.3 professional farmer training program will be developed on concept of Program RBL, so in addition to the key indicators above, project has developed additional three DLIs outcome indicator i.e (DLI-1, incremental number of farmers completing the new professional farmer development training program; DLI-2, Incremental number of women completing the new professional farmer development training program; and DLI-3, Reduced age of the trainees completing the new professional farmer development training program, in line with the result-based lending approach that will be piloted under this project. These DLIs be used to trigger the disbursement of funds for sub-component A.3
53. **Expected outcomes:** Expected outcomes include: (i) strengthened inclusive New Economic Entities; (ii) enhanced participation of poor and vulnerable households in rural economic growth; (iii) local economic development enhanced; (iv) increased economic opportunities for women and youth; (iv) enhanced resilience to the negative effects of climate change.
54. **Project duration:** The project will be implemented over 5 years.

2.2: Project area and Geographical targeting

55. **Project area:** The Project will be implemented in 10 counties within the four municipalities/prefectures of Chengde, Xiangxi, Shaoyang and Chenzhou in the North-East and Western part of Hunnan Province (i.e. Shimen and Taoyunan counties in Chengde prefecture; Guzhang, Fenghuang, Luxi and Longshan counties in Xiangxi Tujia and Miao Autonomous prefecture; Shaodong, Daxiang and Longhui counties in

Shaoyang prefecture; and Rucheng county in Chenzhou prefecture). Among them, six counties -- Shimen, Longhui, Guzhang, Fenghuang, Luxi and Longshan are located in contiguous poverty block of Wulin mountain area, and Rucheng was a part of contiguous poverty block of Luoxiao mountain area. Thus, seven of 10 counties are national-designated poor counties. In addition, Guzhang, Fenghuang, Luxi and Longshan counties are belong to Xiangxi Prefecture which is the only minorities inhabited prefecture in Hunan Province.

56. The total rural population of ten project counties was 6.20 million in 2018, and 4.11% of them live in the project area (0.255 million). Farmers' net income per capita was averaged around CNY9,846 in project area, which was 30% less than the provincial average level per capita income. Besides, the average per capita farmland was 1.12 mu in project area.
57. Criteria for the selection of these counties included: currently or previously classified as national or provincial poverty counties, presence of industries with a market potential, and commitment of the local government to the objectives and proposed approach of the project. The targeted project area is one of poorest areas both at national and at province level. The poverty incidence in the project area is about 16%, nearly half time higher than county average (11%) and Ten-times higher than provincial average (1.5%). Farmers' net income per capita was averaged around CNY9,846 in project area, which was 30% less than the provincial average level per capita income.
58. **Ethnic minorities in project area:** Though Hunan is not considered as a prime ethnic region of China, western and southern part of province are the home of some ethnic groups, accounting for 10 percent of the population. Five of the ten project counties are located in the so-called "cultural diversity area" of Hunan. In Xiangxi prefecture (western Hunan), Tujia and Miao ethnic groups account for 80 percent of the population in the prefecture. Four of seven poor counties of Xiangxi prefecture falls within the project area. Overall, about 30 percent of the population in the project area belong to ethnic minority groups. Main ethnic minority groups in the project area are: Tujia, Miao, Hui, Uygur, Yao and She people.
59. **Main Causes of poverty in project area.** According to the monitoring of local government, the major poverty causes at small-farm householder level was the failure of crops due to natural disaster (flooding, drought, etc), disability of household including aging population, elderly terminal illness, children education cost, lack of skill, lack of enough young labor and lack of investment. Similarly the agriculture development industry in project area is constrained by lack of educated young labor due to labor migration, poor agricultural infrastructure with low productivity, insufficient agricultural productivity, lack of processing facilities, low processing rate of agricultural products with under-developed value chain, natural disasters and poor and inconvenient transportation conditions including rural infrastructure. The proposed

project activities cater all these constraints to address the poverty, strengthen the resilience and promote inclusive rural development.

2.3 Target groups and Targeting strategy

60. **Targeting strategy:** The project will adopt the following targeting strategy:
61. **Geographical targeting:** the project will target current or former nationally- or provincially-designated poor counties, and - within these counties - priority will be given to villages and communities with a higher than county average concentration of registered or formerly registered-poor. It is expected that 127 administrative villages in 66 townships will be identified for project implementation. These represent about 4 percent of villages and about 36 percent of the townships in the 10 project counties . The project would cover about 55 deep poor villages which accounts for 43% of all the 127 villages in project area. The project target population is about 0.255 million. Poverty incidence in the project area is about 16%, nearly half time higher than county average (11%) and Ten-times higher than provincial average (1.5%). Farmers' net income per capita was averaged around CNY9,846 in project area, which was 30% less than the provincial average level per capita income..
62. **Poverty targeting:** Within the project area, focus will be given on vulnerable people (i.e. households who have been registered at least once in the National Poor Registration System since 2014). There were about 16 percent of target population in project area registered with NPRS. The average per capita income in project area is 30 percent lower than the provincial average. The ethnic minorities comprised 30% of target population. It is in fact expected that no more households will be in the NPRS after 2020. However, these population are vulnerable to fall back to poverty in wake of any natural calamity like outbreak of Covid-19.
63. **Gender, youth and ethnic minorities targeting:** among the project beneficiaries, specific focus will be given to vulnerable households, as well as: (i) women; (ii) youth (i.e. people between 18-45 years of age)[5]; and (iii) ethnic minorities. Particularly, the project will actively favour women and youth participation as follows:
 1. **Women targeting strategy:** (1) Women participation in supported new economic entities will be promoted as follows: (i) Women-led enterprises/cooperatives will be encouraged: the project will support at least four women-led economic entities per county; (ii) sex-disaggregated eligibility criteria will be applied to select the economic entities to be supported by the project: percentage of women in these entities should be higher than the percentage of women in the local village; women should be included in the enterprise/cooperative's board; at least 60 percent of the participants to trainings and capacity building activities will be women particularly in professional farmer training program; (2) Women

entrepreneurship will be favoured by awarding at least 25 percent of the start-up investment support *to women*.

A separate instrument under Program RBL is launched to specifically influence government policies to make it more gender sensitive on-going national program of professional farmer training. *Under this instrument all disbursement linked indicators (DLIs) are gender-sensitized will result in gender mainstreaming and empowerment.*

2. *Youth targeting strategy:* (1) Youth participation in supported economic entities will be promoted by supporting at least two youth-led entities per county; (2) Youth entrepreneurship/ start-up business will be favoured by awarding at least 50 percent of the start-up investment support to youth, of which 50 percent will be for young women.
3. *Ethnic minorities targeting strategy:* about 30 percent of the population in the project area belong to ethnic minority group. Ethnic minorities in the project area are in general well integrated in the existing socio-economic context, have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have not distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and not well developed areas. Government policies targeting rural poor and vulnerable households do not differentiate based on ethnicity, but target based on poverty indicators.

64. **Beneficiaries:** The project is expected to directly benefit an estimated 328000 individuals (or 72,500 households), out of which about 17 percent are formerly registered poor, 50 percent women, 30 percent youth, and 30 percent belong to ethnic minorities (i.e. direct beneficiaries). In total the project is expected to outreach to about 413800 individual beneficiaries including indirect beneficiaries, corresponding to 88000 households.

The total rural population of area of intervention of ten project counties is around 6.2 million with 1.9 million households. The eligible population in ten project counties is about 669000 people with 196421 households and thus the total beneficiaries accounts about 413800 people (62% of eligible population) with 88000 households.

Chapter 3: Project Components/Outcomes, Activities and Implementation Strategy.

65. The project is organized along two complementary components, 1) Inclusive Private Sector Investment Models; and 2) Climate-proofed Public Infrastructure Planning and Development; supported by a third cross-cutting component, 3) Project Management, M&E, Knowledge Management and Policy.

Outline of these components are following:

Component A: Inclusive private sector investment models

Sub-component A.1: Demonstrating inclusive rural business development

A.1.1 : Investment support for rural businesses

A.1.2: Business start-up support for Youth and Women

Sub-component A.2: Providing rural business development services

A.2.1: Business incubation / Services centers support

A.2.2: Public institution based rural services

Sub-component A.3: Professional Farmer Training (Program-RBL)

Component B: Climate-proofed Public Infrastructure and Improvement of Rural Living Condition

Sub-component B.1: Improving Climate resilience infrastructure

B.1.1 Piloting climate-proofed smart Irrigation investment

Sub-component B.2: Improving rural infrastructure system.

B.2.1: Improving and developing safe drinking water supply system

B.2.2: Improving and developing rural roads

B.2.3: Improving and extending power supply system

B.2.4: Land preparation

B.2.5: Improving environment

B.2.6: Supporting infrastructures' operation & maintenance (O&M)

Component C: Project Management, Knowledge Management, M&E, and Policy

66. These components and related sub-components along with their activities are narrated below with detailed implementation arrangements.

3.1 Component A: Inclusive Private Sector Investment Models:

67. This component will create profitable livelihood opportunities in the project area by (i) promoting inclusive private sector investment models that will generate new and more diversified income opportunities; and (ii) supporting talented young people and women to start their own business.
68. **Rational:** The rural areas in the project counties in Hunan are experiencing a fundamental transformation. The traditional farms are too small to provide a full family income required to stay above poverty levels. Over the past decades a significant part of the agricultural workforce has left the rural areas. Most families have at least one, often both middle generation family members outside for most of the year. For the remaining labor, often the elderly or the women of migrating male labourers, maintaining the farming business often becomes a burden rather than an attractive livelihood opportunity. Within this context, the Project aims at (a) promoting models generating new and more diversified income opportunities, responding to the needs of people in a transformed rural economy and leading to an inclusive participation and sharing of new prosperity by supporting farmer organisations, partnership models and production structures, which are viable and competitive and at the same time give people choices suitable for their individual situation and risk perceptions such as leasing out their land, participating as shareholders in a cooperative or an enterprise, or earning labour income, and (b) generating new economic growth, competitiveness and income opportunities in rural areas by (i) developing attractive industries with a strong focus on inclusiveness and participation, value addition, special products, brands, etc. (ii) stimulating local entrepreneurship and attracting new investors in agricultural or rural-resources-based non-agricultural activities (e.g. tourism, recreation of elderly, etc.); and iii) up-gradating the skills and capacity of rural people in particular of women and youth to become business oriented farmers and entrepreneurs through professional training.
69. *Value chain approach and focus on opportunities of "value-addition":* Due to the remoteness and relatively low productivity combined with high transaction costs agricultural production in the remote and disadvantaged project areas is generally less competitive. This is the major reason why traditional growth strategies are facing serious limitations. Such models are primarily based on a subsidization and expansion of (often non-competitive) products pushed by local governments, which have sometimes led to building substantial overcapacities. Their suitability for long-term and sustainable poverty alleviation is questionable. The project therefore builds on a change from a production-oriented approach to an end-market consumer-oriented

approach. This end-market and end-consumer orientation of the project builds on three macro-trends, which offer significant growth and development opportunities for the project areas:

1) Growing consciousness and consumer preferences for high quality and safe food: China's food sector is overshadowed by a significant consumer uncertainty and mistrust in the quality and safety of food. A large and growing segment of consumers is interested paying significantly higher prices for food products, when they can trust in quality and safety. Consumers are also increasingly willing to pay for environmental and social features in the production process.

2) Information technology (IT): China's diversified IT development has penetrated most aspects of people's life in China, probably more than in most countries' in the world. Internet shopping including ordering food and even fresh food product has become common feature for many urban citizens. Modern information technology offers a range of opportunities for directly linking producers and consumers, while a modern food distribution system, which include tagging and tracing of products using web-based applications, bring consumers and producers closer. It permits development of more efficient forward and backward linkages and facilitates faster responses to consumer preferences, as well as increasing consumer control over production standards.

3) Increasing mobility and fast-growing tourism industry: Urbanization continues at a rapid speed, people also have increasingly more time and income available, which make the tourism industry in China one of the fastest growing sectors. In addition, mobility has increased, more people owning cars and/or use the rapidly developing transportation infrastructure to visit remoter areas. While tourism includes wide range of choices, rural and agricultural tourism is one of the fastest growing segments of it. It is expected that the COVID-19 impact on tourism will be short natured and generally favour local and national tourism, while international tourism will significantly shrink. Tourists discover their interest for unique and authentic sites, which include cultural and ethnic minority features. Urban families and in particular elderly people based in urban areas spend vacations in rural areas. The targeted project areas provide a potential to cater for rural, agricultural and cultural tourism. Opportunities also exist of combining rural tourism with direct marketing of local food and agricultural products.

70. The project component design focuses on building on the above mega-trends, which provide the project areas in Hunan with promising development opportunities allowing them to turn historically disadvantaged into advantaged areas with a range of sustainable and viable economic growth options. The project design thereby takes a holistic development approach, addresses entire value chains, tries to shorten those value chains and keeps them transparent by facilitating forward and backward linkages and encouraging market responsiveness. The project accentuates the roles and

responsibilities of different stakeholders in this process and focuses on sustainable, long-term growth opportunities rather than short-term interventions.

71. The COVID-19 outbreak experienced over the past months resulted in major disruptions of agri-food systems, including the temporary shut-down of wet markets, animal feed factories, wildlife breeding facilities, and disruption of transport systems. Farmers were not able to access feed supply and had to cull animals. The COVID-19 outbreak and some of the control measures, such as social distancing and mass quarantine, have also adversely impacted the food product supply chains in Hunan. The preparation team suggests scrutinising the design of the project in the light of the impact, preparedness, and responsiveness to COVID-19.
72. Several of the proposed value chains to be supported under the project would involve livestock including chicken, goats, pig, or cattle. Diseases shared between humans and animals (“zoonotic” diseases) comprise more than 60 percent of known human infectious pathogens. The project would consider for all investments involving human-animal interactions, specific risk assessment and mitigation measures following the ‘One-Health’ principles and operational framework developed by the World Bank¹⁹. Each investment in livestock related value chain under the project will undergo a specific assessment for health risks and risk mitigation measures by zoonotic diseases experts. A risk avoidance and reduction strategy would be developed and feasible mitigation measures, which are in the scope of the project would be implemented.

Component A Implementation Strategy:

73. **Responsibilities:** The overall responsibility for the implementation of this component will be with the Department of Agriculture and Rural Affairs at the Provincial (DARA), Prefecture (PARA) and County (CARA) levels. DARA/CARA will coordinate with other line departments/offices such as Finance, Development and Reform Commission, Water, Forestry, Roads, Women Federation, Ethnic Minority, Youth etc. to provide support and inputs for the project.
74. **Project implementation principles:** The implementation of the project will follow the following principles:
 - **Open and Transparent** for all every eligible applicant and for the general public (through public advertisement, invitation for proposals and public disclosure of support to cooperatives, investors and associated enterprises);
 - **Business and Client Driven** by cooperatives, investors and agro-enterprises (not by local Governments and County Development Plans)

¹⁹ Available online at:

<http://documents.worldbank.org/curated/en/703711517234402168/Operational-framework-for-strengthening-human-animal-and-environmental-public-health-systems-at-their-interface>

- **Economically Efficient, Financially Viable and Sustainable**, where all supported investments to private entities will be based on a satisfactory and convincing business plan; and
- **Focus on vulnerable groups**; the project will focus on ensuring that the benefits generated by the development of the project areas (through the support to lead "industries", the creation of new employment opportunities, and comprehensive infrastructure development) primarily benefit identified vulnerable groups, i.e. former archived poor and relative poor households, women, youth, and ethnic minorities.

75. **Preparatory and early stage implementation activities:** While each county has already proposed several detailed investment activities in support of one or several of their key industries (value chains), the project would take a step back and follow a sequence of preparatory and early stage implementation activities. Under the project the detailed investments activities will be defined or re-defined following a process of targeting, awareness building, cooperative capacity building, training, facilitation and investment proposal preparation by each of the supported investors or cooperatives or agri-enterprise in support of cooperatives/households. The following preparatory steps will be undertaken:

- **County Training & Awareness Workshops** will be conducted to make all county PMO staff and related line department staff aware of the project principles and familiar with the detailed implementation arrangements (familiarity with project documents, manuals, safeguard requirements, etc.); funds for this activity are provided under the Management Component for each county.
- **Project Information Disseminations** providing full project information to the villages and stakeholders in the value chains; each county will ensure that project information is widely disseminated, and full project information is provided to all project villages, and to all stakeholders in the value chains including traders and processing companies in the counties.
- **Round Table Stakeholder Meetings** will be conducted (at least one for each value chain) in each county over the first 2-3 months. For these meetings all relevant private and public sector partners (processing companies, traders, existing cooperatives, lending institutions), research institutions, government line department representatives, etc., should be invited and informed about the project and discuss the development constraints, opportunities, partnership arrangements and proposed options for the value chains. The counties will keep records and provide documentation of the invited and participating stakeholders and the minutes of such meetings.
- **Technical Advisory Groups (TAG)**; The CPMO will establish a Technical Advisory Group (TAG), with at least one representative from each stakeholder group nominated or elected during the round table stakeholder meetings. It is

important that the TAG will not only include members from the Government line departments but include members from the private sectors, businesses, rural finance institutions, etc. The role of the TAG will be to guide and advice project applicants in the preparation of business plans and their subsequent technical review. Competence in general business development, management and in market development is an essential element for the TAGs. TAG members would not be hired but can be compensated for their work and services using project funds allocated under the Business Service Centre subcomponent. The TAG would include a special zoonotic diseases expert in case livestock related investment would be expected.

- **Formation, Registration and Training of Cooperatives;** Since the project will primarily focus on agribusiness entities as the main entry point for improving existing change fupin models (i.e. poverty reduction through agribusiness industry development), each county PMO will start to mobilize potentially interested new economic entities in the project areas.

76. The component A includes three sub-components: A.1) Demonstrating Inclusive Rural Business Development; A.2) Providing Rural Business Development Services; and A.3) Professional Farmer Training.

3.1.1 Sub-Component A.1: Demonstrating Inclusive Rural Business Development:

77. This sub-component will pilot and demonstrate "inclusive rural business development models" by providing incentives (i.e. investment support) to (i) New Economic Entities that include vulnerable rural households, and particularly women and youth, in their business models - thus offering them the opportunity to participate in and benefit from the economic development opportunities in the project area, and (ii) youth and women entrepreneurs to stimulate their productive and self-development capacity. Project supported models will offer a variety of choices depending on individual capacity and risk perception
78. **Rational:** The Government's long-term strategy and vision of the rural areas in China is laid out in its Rural Revitalisation strategy. This strategy builds on supporting private sector development in rural areas through a mix of private sector players called New Economic Entities (NEEs), which include farmer professional cooperatives, big households, family farms and lead enterprises. While these new players are needed as innovators, investors and generators of economic growth and development, it is critical that, in this transformation process, the weak and vulnerable people are not pushed out, but protected and fully participated in future economic development opportunities. The project supports the overall vision of Rural Revitalisation with a mix of different NEEs as project partners and entry points and supports practical and operational models of participation and inclusiveness. These models will be designed to give existing

households with fragmented labor resources, women, youth and small farms, which are too small for being competitive or generating a sufficient family income, options to participate in economic development opportunities, stimulate their productive and self-development capacity, and allow them to make informed choices, rather than giving up their land and productive resources for small lease fees. Project supported models will offer a variety of choices depending on individual capacity and perceptions ranging from fully consolidating land resources in farmer organisations and becoming shareholders, using joint actions for inputs, marketing or technical services, engaging in partnership arrangement with enterprises or large farms (e.g. out-growing or marketing partnerships), providing labor for cooperatives or other operators, or gradually retreating from farming, leasing the land and focusing on labor migration.

Scope of Work under Sub-component A.1

79. Major activities under this sub-component include: i) Investment support for rural businesses; and ii) Business start-up support for Youth and Women.
80. **Activity A.1.1- Investment Support for Rural Businesses:** The project would provide investment support for rural businesses (new and existing) which demonstrate viable and inclusive business models featured by genuine participation of vulnerable households and fair benefit sharing arrangements. About 20 of such entities would be supported in each county. Professional farmer cooperatives would be the primary focus under this sub-component. Other business entities (individual entrepreneurs or lead enterprises) can also be supported with project financing provided that their business proposals generate benefits to the project target group. The project would encourage proponents to present innovative investment ideas for risk reduction or mitigation in relationship to zoonotic diseases or in responsiveness to the control of SARS-CoV-2.
81. Project investments would mainly focus on value addition, market linkage and capacity building. *IFAD funding* could be used for: (a) cooperative-level or small business start-up investments in new production systems, including production systems for advanced breeding stock and improved seedlings; (b) pre-processing and processing technologies for agriculture and related products; (c) storage and marketing facilities; (d) market exploration and market development to provide access to new and higher-value markets; (d) up-grading of quality standards, labelling and certification, branding, product tracing, logistics, food safety and others; and (e) services and training. IFAD fund would not be used for annual operating expenses (e.g. salaries, annual production inputs) or working capital.
82. **The financing from project funds would generally not exceed 60% of the total investment costs (maximum RMB 1.0 million for each eligible proposal).** The remaining funds would come from the business entities' own financial resources and/or from commercial loans. A detailed financing plan would show the detailed investment items and contributions from different sources. In the case of investments designed to

reduce the spread of zoonotic diseases or in responsiveness to the control of SARS-CoV-2 the project funding could be up to 80% of the investment costs.

83. **Implementation Strategy and Arrangements for A.1.1 Activity:** This activity would include a variety of support models, including: (i) *Matching grants for farmer professional cooperatives*, (ii) *Joint Company-Cooperative Partnership models*, (iii) *Company- household models*, or (iv) *Other Innovative Models*.
84. (i) Matching Grant support for Farmer Professional Cooperatives: Newly created or existing registered farmer professional cooperatives meeting the minimum eligibility requirements as defined in Attachment 1 will be eligible to apply for a matching grant from the project. This funding will be provided based on an acceptable and approved business plan (for contents and format see Attachment 2). The financing would be up to 60% (maximum RMB1.0 million for each eligible cooperative) from the project and at least 40% from the cooperative's own financial resources and/or from commercial loans. The financial plan (see Attachment 2, Appendix Table 2) would detail the investment items and contributions from different sources.
85. *IFAD funding* could be used for: (a) cooperative-level start-up or up-grading investments in new production systems, including production systems (e.g. advanced breeding stock, improved seedlings, re-grafting, etc.); (b) pre-processing and processing technologies for agriculture and related products; (c) storage, drying, packaging, or other marketing facilities; (d) market exploration and market development to provide access to new and higher-value markets (analysis, development of marketing strategies, etc.); (d) up-grading of quality standards, labelling and certification, branding, product tracing, logistics, food safety and others; and (e) general services and training. IFAD fund cannot be used for annual operating expenses (e.g. salaries, annual production inputs, fertilizer, farm labour, etc.) or working capital. The matching contribution from the cooperative should include new investments (already existing assets cannot be considered) and could also include working capital.

Steps to be taken:

- Notification of the eligibility by the county PMO.
- Preparation of business plan proposal (investment plan) by the cooperative.
- Involvement of the TAG in reviewing and quality improvement of the business plan organised by the county PMO.
- Review and approval of the business plan by the County Department of Agriculture and Rural Development.
- Preparation and signing of a *Financing Agreement* between the Cooperative and the county PMO.
- Notification of the PPMO about approved plan.
- Implementation by the cooperatives in close coordination with the county PMO.

86. The IFAD funds would be used to generate additional assets (tangible or non-tangible, see below) and would be capitalized as shares for farmers or for cooperative farmer members by giving preference to poor household members 1.5 (poverty households) versus 1 (ordinary farmer households). (Example: in a cooperative with 100 members, of which 50 are poverty households, each ordinary household would receive 0.8% shares, each poverty households would receive 1.2% shares). Project funds injected will be shared on membership basis not on percent of their share in the Cooperatives.
87. *(ii) Joint Company-Cooperative Partnership models.* This activity will address farmer cooperatives, which are not yet strong enough to develop an independent self-standing investment plan. They would do this in partnership with a company or enterprise. At the same time, it would be avoided that farmer cooperatives are fully taken over and captured by a company. Eligible cooperatives would be existing registered cooperatives and newly created cooperatives. During the investment process such cooperative would be developed up to the standards of an operational farmer professional cooperative (for the criteria see Attachment 1), while a minimum set of entry criteria will need to be met before IFAD funding can be provided. Such criteria would include registration, membership, and benefit sharing (criteria 1 to 6 and 11 of the list in Attachment 1). Eligible partners enterprises could obtain a share in the cooperative not exceeding 40% of the total shares in the cooperative.
88. The investment from the project would be based in an agreed investment plan as part of an approved business plan and a signed tri-partite *Financing Agreement*. The maximum investment per each partnership proposal would be RMB 1.0 million. The IFAD funds would need to be matched with the same or a higher amount from the company. The IFAD funds would be used to generate additional cooperative assets (tangible or non-tangible, see below) and would be capitalized as shares of the cooperative farmer members by giving preference to poor household members 1.5 (poverty households) versus 1 (ordinary farmer households). (Example: in a cooperative with 100 members, of which 50 are poverty households, each ordinary household would receive 0.8% shares, each poverty households would receive 1.2% shares). Project funds injected will be shared on membership basis not on percent of their share in the Cooperatives.
89. The leading role in the implementation of this activity would be initially with the county PMO. As soon as the business incubation/service centres become operational, this function will be transferred to the centres. The approach would be as follows:
- *Identification of interested/suitable cooperatives;* the county PMOs (later centres) together with the township governments will through the public awareness and information campaign (see above general preparatory steps) invite and identify interested cooperatives.
 - *Preparation of a brief profile;* the county PMOs (later centres) will prepare short profiles with the key features of each interested cooperatives (membership, assets, type of industry, production arrangements, business arrangements, etc.).

- *Public invitation and first screening of potential companies;* based on a batch of cooperative profiles county PMOs (later centres) will publicly invite interested investor companies.
 - *Signing of Intentional Agreement;* the cooperatives and investor(s) would sign an intentional agreement stating the principles including an agreement of both sides to work under the rules of the cooperative law and the agreement that the investors share(s) would be limited to a maximum of 40%. The county PMOs (later centres) would assist in the preparation of such agreement and prepare a standard format.
 - *Preparation of a business plan/investment proposal and financing plan;* Cooperative and investor company will jointly prepare an investment plan (format to be followed see Attachment 2). The eligible investment items would include: (a) cooperative-level start-up or up-grading investments in new production systems, including field level production (e.g. advanced breeding stock, improved seedlings, re-grafting, etc.); (b) pre-processing and processing technologies for agriculture and related products; (c) storage, drying, packaging, or other marketing facilities; (d) market exploration and market development to provide access to new and higher-value markets (analysis, development of marketing strategies, etc.); (d) up-grading of quality standards, labelling and certification, branding, product tracing, logistics, food safety and others; and (e) general services and training. IFAD fund cannot be used for annual operating expenses (e.g. salaries, annual production inputs, fertilizer, farm labour, etc.) or working capital. The matching contribution from the cooperative and/or investor(s) should include new investments (already existing assets cannot be considered) and could also include working capital.
 - *Technical support,* the TAG will review and provide suggestions for improvement of the investment plan and comment on the technical and financial feasibility of the plan.
 - *Review and approval of the business plan* by the County Department of Agriculture and Rural Development.
 - Preparation of a tri-partite *Financing Agreement* between the Cooperative, the company and the county PMO.
 - *Checking entry criteria and signing Financing Agreement;* the county PMOs will verify that the minimum entry criteria (No. 1 to 6 and 11 in Attachment 1) are met before signing of the tri-partite *Financing Agreement* between the Cooperative, the company and the county PMO.
 - Notification of the PPMO about approved plan.
 - Implementation by the cooperatives in close coordination with the county PMO.
90. *(iii) Company-household models.* This activity will link individual farmers where cooperatives are not suitable in attractive value chains. Eligible companies must have proven business experience and technical, financial and management capacity and a ready market (more detailed criteria such as credit rating, minimum size, length of operational experience, etc., would still need to be defined in coordination with the implementing units).

91. The project investment (IFAD) funding will be limited to finance the household investments including joint infrastructure, training and capacity building (no enterprise assets). Project funds would be channelled from the PMO directly to farmers (not through the companies/enterprises). The maximum total investment per beneficiary household would be RMB 30,000 with a total investment per each business plan not exceeding RMB 2.0 million., of which a maximum of 50% would be financed using IFAD funds. The remaining at least 50% should be financed as beneficiary contribution. The itemized financing plan should identify investment items to be financed by IFAD and items financed by the beneficiaries (cooperatives, companies, individual households, etc.). Co-financing from the beneficiaries can include labour and in-kind contributions. Past investments prior to the approval of the investment proposal and regular operational costs cannot be considered as co-financing.
92. The leading role in the implementation of this activity would be initially with the county PMOs. As soon as the business incubation/service centres become operational, this function will be transferred to the centres. The approach would be as follows:
- *Identification of interested/suitable companies*; the county PMOs (later centres) will through the public advertisement and awareness workshops identify interested companies and present the general objective, eligibility criteria, conditions and procedures to interested candidates.
 - *Screening of potential companies*; the county PMOs (later centres) will do a screening and pre-select suitable candidates and provide a go-ahead to enter into a detailed participatory preparation of business plans/investment proposals.
 - *Identification and socio-economic profiling* of the beneficiary households (location, number, poverty, ethnic minority, gender and age of main participant/beneficiary, farm size, etc.).
 - *Participatory preparation of a joint investment proposal and financing plan*; Companies and farmer cooperatives or farmer households will jointly prepare an investment plan (format to be followed see Attachment 2). The eligible investment items would include: (a) cooperative-level start-up or up-grading investments or individual households investments in new production systems, including advanced breeding stock, improved seedlings, re-grafting, etc.; (b) pre-processing; (c) storage, drying, packaging, or other pre-marketing facilities; (d) up-grading of quality standards, costs related to achieving green food or organic certification at the farm level, product tracing, logistics, food safety and others; and (e) general services and training. IFAD fund cannot be used for annual operating expenses (e.g. salaries, annual production inputs, fertilizer, farm labour, etc.) or working capital. The matching contribution from the cooperative and/or households should include new investments (already existing assets cannot be considered) and could also include labour and working capital.
 - *Technical support*, the TAG will review and provide suggestions for improvement of the investment plan and comment on the technical and financial feasibility of the plan.

- *Review and approval of the business plan* by the County Department of Agriculture and Rural Development.
 - Preparation of a tri-partite *Financing Agreement* between the company, households, and the county PMO.
 - Notification of the PPMO about approved plan.
 - Implementation by the county PMO in close coordination with farmers and the company.
93. *(iv) Other Innovative Models.* The project provides a window for supporting other innovative CYFP models to be proposed by the participating counties, which may involve leading household farms, village economic cooperative groups and other types of economic entities. The implementation approach would be as follows:
- The related entity would make proposals for individual investments within the scope of the project, while the investment intensity should not exceed RMB 30,000 per beneficiary households and the total investment per proposal should not exceed RMB 2 million.
 - The related entities will forward the suggested investment proposals with a detailed investment plan to the cPMO, which would review and confirm that proposals are in line with the agreed principles of the project in particular: i) have a clear focus and identification of the IFAD targeted main beneficiaries (poor, or poverty vulnerable smallholder households, women, youth and/or ethnic minority); ii) a full participation of the target groups in the design, implementation and benefit sharing; and iii) a reasonable assurance of sustainability and scaling up opportunity.
 - The CPMO would forward the confirmed proposals to PPMO for an individual review and appraisal before the investments can be implemented.
94. **Activity A.1.2- Businesses start-up support for Youth and Women:** The project would provide a specific facility to support business plans of young investors (age below 40) and women entrepreneurs. Project support will be conditional of a successful training and ongoing mentoring of the candidates and based on a viable business plan. The financing from project funds would generally not exceed 80% of the total investment costs (maximum RMB 0.2 million for each start-up) It is expected that some 8 to 10 candidates would be supported in each county.
95. All business plans would be reviewed and evaluated by a team of experts (Technical Advisory Group (TAG)) organised by the County PMOs. The TAG would include a special zoonotic diseases expert in case a livestock related investment.
96. **Implementation Strategy and Arrangements for A.1.2 Activity:** For youth²⁰ and women entrepreneurs successfully participating in the business developing capacity building services under *Sub-Component A.2a* the project would provide start-up investment support as a matching grant. The responsibility for the implementation of this activity would be assigned to the BISCs.

²⁰ Youth entrepreneurs would be considered up to an age of 40 years (to be confirmed) at the time of application.

97. The investment would be based on an acceptable business plan and would cover up to 50% of the investment costs with a maximum of RMB 200,000 per start-up. The remaining funding should be financed from the investor's own funds (minimum 10%) and for commercial loans. The investment support would be provided to agricultural or non-agricultural businesses (e.g. tourism, private e-commerce shops and services, agricultural machinery services, etc.) with the business to be registered in rural areas in the project counties. Registration of businesses in the county seats would not be eligible. Joint business registration by several individuals up to a maximum of 3 people are acceptable as long as all individuals meet the targeted client group of youth or women.
98. The implementation approach would be as follows:
- The BISCs will advertise this opportunity through websites and public announcements to interested candidates.
 - Awareness workshops will be conducted for interested candidates, which would pre-register.
 - Pre-registered candidates will participate in relevant training events organised by the BICS. A list of mandatory training events will be prepared by the BICS.
 - Candidates successfully trained will prepare business plan proposals with a financing proposal. The BICS will provide technical support for the preparation of such proposals and present the proposals/candidate to the evaluation/approval committee.
 - The county PMOs will nominate a 3-member evaluation/approval committee, which would evaluate and approve proposals/candidates. The members of the committee will include a government representative (e.g. the county PMO director) and two non-government members (e.g. member of private business community, local banks) with no relationship or personal interests in the proposal/candidate.
 - For approved candidates the BISC will nominate a mentor, who will continue to provide periodic support to the start-up investor for at least a period of one year.
 - Implementation/financing will be based on a signed a tri-partite *Financing Agreement* between the start-up investor(s), PMO and the BISC.
 - Notification of the PPMO about approved candidate.
 - Implementation by the investor in close coordination with the BISCs and PMO.

3.1.2 Sub-Component A.2: Providing Rural Business Development and livelihood Services:

99. This sub-component will provide services and support (i.e. training on advisory services, facilities, etc.) to (i) talented young people and women to start their own business, thus retaining young business-minded people in the rural areas - or attracting them from other areas; and, (ii) to farmers to improve access to weather and climate forecast information and advice on options to make their farming practices and marketing more resilient to climate change. Specifically, this sub-component will support the concentration of currently scattered training activities in a comprehensive training and service centre with professional expert support, which would (i) provide a

full range of business support services, and (ii) act as a hub for communication and business facilitation.

100. **Rational:** China's imbalanced rural and urban development along with a rapid urbanisation has resulted in a severe transfer of human and financial resources from rural to urban areas. This mainly involve the active workforce of the middle and young generation. Money earned in agriculture is not invested back in the rural areas to created or sustain attractive job opportunities encouraging the youth and the middle age generation to stay, but is invested in the purchasing properties in urban and semi-urban areas and in the education of the children with the objective for them to move out of agriculture to better paid occupations in towns and cities. This combined outflow of money and human resources has rapidly eroded the attractiveness of rural areas for young people. A key challenge in the rural revitalisation program is to break this vicious cycle and provide incentives for young people to stay and/or attract business minded young people from other areas back to start their own businesses or undertake other farm and non-farm business activities. This is equally important for young and middle generation women in rural areas, which constitute a significant potential for entrepreneurship and new business operations. Often, they must stay in the villages, while the husband is migrating for work, and they have proven to be able to run phenomenally successful rural businesses in their villages.
101. Attracting young people back into rural areas is a clear Government strategy with a high relevance for the rural revitalisation. The All-China-Women-Federation also runs programs to train women to become entrepreneurs and start their own business. The youth league is setting up finance and services facilitating centres for youth start-ups in rural areas. However, the local Governments are not well equipped to support entrepreneurship programs and business start-ups. The Government has no suitable support or services structure and facilities in place and the understanding and knowledge of Government officials of business entrepreneurship and related requirements is limited.
102. **Scope of Work:** Major activities under this sub-component would support two types or channels of service provision: a) Business Incubation/Service Centers (BI/SC), which follow a semi-private sector orientation, and b) Public Institution based Rural Services through existing public sector institutions.
103. **Activity A.2.1- Business Incubation/Service Centers (BI/SC):** The project would support the setting up and operation of comprehensive Business Incubation and Service Centres (BI/SC) at the county level. The Centers would provide services, training, advice and mentoring in business development, preparation of business plans, marketing skills and enable market linkages. Such centres would also serve as a platform for youth and women entrepreneurs and investors to match them with rural countryside investment opportunities (identify locations, partners, co-investment opportunities, land availability, etc.). Services would be provided county-wide. It is expected that the Centres would also take over some of the functions that in the past

were provided by the PMOs, and that they cannot provide anymore. This sub-component would mainly finance services. Promising entrepreneurs and emerging start-up enterprises would be encouraged to prepare a business plan for support under sub-component A.1 above. It is expected that the sub-component would contribute to generate new job opportunities for rural residents. The project would support the following activities:

104. *Activity 1:* Business support service centres would be set up in each of the ten project counties attached to the existing E-commerce Centres, if available, or at a rented location. The project would provide up to RMB 250,000 for the necessary refurbishing of the location (electricity, networking, furniture, internal walls, etc.) and government counterpart finance will pay for the rental and office operating costs. Each centre would hire a core staff consisting of a manager and an administration officer. All other expertise would be contracted on a short-term demand basis (consultant basis). The core staff would develop a data base of clients (e.g. existing farmer cooperatives, small businesses, individual entrepreneurs, interested youth and women, etc.) and organise such clients WeChat groups or other IT based means. The Center would also set up and constantly up-date a data base of experts and service providers.
105. *Activity 2:* The Centers would provide *business development service* in three ways: a) as counselling services, where experts would be made available for interested clients to consult; this could include general business advisors, marketing expert, IT and e-commerce experts, accounting and financial experts, legal experts, loan officers of finance institutions, etc.; b) as training services, where the Center would organise regular training for example on cooperative formation, cooperative management, accounting, IT and e-commerce, marketing, etc.; and c) round table and match-making meetings, where interested buyers would be invited to meet with the local cooperatives or small businesses.
106. *Activity 3:* The Centers would provide a specific mentoring program for start-up businesses of youth and women. Candidates would be invited to register. They would need to participate in mandatory number of the above counselling and training event. In addition, they would need to go through an internship training at local successfully operating businesses or enterprises. If considered suitable, they would be eligible to be considered for support under Component A1 receiving project investment support based on a suitable business proposal.
107. *Activity 4:* Depending on the specific or yet emerging demand the Centers would also provide other business support services. This could include providing accounting services. Helping with the identification of managers or investors for cooperatives and more.
108. Initially most of the services provided by the Centers would be paid by the project if clients remain limited to the target groups and entities under the project. Gradually each Center would develop a cost-recovery plan and charge fees for some of the most

attractive services (e.g. providing accounting services, legal advisory services or similar). Given the public good nature and function of these Centers a full cost recovery cannot be expected, and the county governments would continue to finance part of their costs after the project out of their budgets.

109. **Implementation Strategy and Arrangements for A.2.1 Activity:** The project would support the setting up and operation of comprehensive Business Incubation and Service Centers (BI/SC) at the county level. The CPMO will be responsible for all implementation activities before the formalization of the Business Incubation/Service Centre (BISC). Once established, BISC will run by its own and will provide services to all small and medium rural business and enterprises including farmer organisations existing or newly established. Particular attention will be given on the *new economic entities* and *new talents* strategically supported in the rural revitalisation approach rural (encouraging entrepreneurship of college graduates, new professional farmers, agricultural professional managers, science and technology experts, and new rural leaders).
110. Among other options, the BISC can be physically located at the recently established county level e-commerce centres (established under the Ministry of Commerce), which generally have sufficient office space, conference, meeting and communication facilities.

The implementation approach would be as follows:

- The county government will issue a document about the establishment of the BISC, role and functions, location, and integration in the e-commerce centres.
- County PMOs will recruit a manager and assistant manager through competitive public recruitment.
- PMO/BISC manager will contract the development of a website for the BISC, which would serve as advertisement of the services and interactive platform with the clients of services (e.g. enrolling in training courses, requesting expertise and special services, etc.).
- BISC will develop a service program, which would include a calendar of regular services and events (e.g. quarterly training course in business accounting, training on business plan preparation, counselling sessions with business lawyers, monthly training on loan application, roundtable meetings with buyers, etc.) or irregular events (e.g. special study tours for cooperative chairmen) or subject matter awareness raising and training events (e.g. impact of climate change on business decisions, business risk and risk mitigation measures) for which suitable experts would be invited. The above website would allow scoping the interest from the client community and responding to emerging service needs;
- The BISC service programs need to show a strong focus on the IFAD target groups; they would become part of the AWPB and would need IFAD approval.

- BISC will establish, continuously up-date and maintain a database with all potential businesses and clients in the county to inform interested clients on services, upcoming event.
- The performance of the BISC and their managers would be measured according to the client services (events and number of people attending). Detailed records would be kept including list of attendants, ID, date/time, etc..
- The payment of the manager would include a performance-based element in his/her contract.
- The BISCs will not employ experts or trainers in addition to the manager and assistant but buy services through individual and institutional contracts procured under competitive procedures.
- For the targeted clients (individuals, youth, women, farmers professional cooperatives (except RBL registered cooperatives), SMEs, etc.) the services would initially be provided for free (costs paid by the project). Non-project clients (e.g. representatives from large enterprises) and cooperatives registered as RBL cooperatives would be charged for the services.
- After year two the BISCs will prepare a gradual cost recovery proposal/plan showing what services could be provided as paid services. The cost recovery plan should aim for a 50% cost recovery at year 3 of the project.

111. **Activity A.2.2- Public Institution based Rural Services:** The project would support to improve farmers' and cooperatives access to weather and climate forecast information and advice on options to make their farming practices more resilient to climate change, i.e. (i) technical assistance to improve the analysis of the changes in crop climatic zones; (ii) upgrade of a few meteorological stations to monitor key parameters relevant to agriculture; (iii) technical assistance to relevant county-level agencies to improve climate-related forecasts, advice, and early warnings; (iv) Epidemic prevention and mitigation (SARS-CoV-2); (v) Provision of other public rural services for the project target groups including land management and transfers services, pest management and fertilization.
112. *Activity 1: Climate smart services:* The project areas generally have favorable climatic condition for agricultural production. Selection by the counties on specialized sub-sectors and project sites has taken due considerations to avoid climatic risks. Nevertheless, small scale and minor agro-climatic hazards are on regular occurrence, though severe hazards cases are rare. Most of such hazards relate to sustained drought, low temperature, hail and heavy rains which can have moderate negative impact to productivity and income loss of the project supported business plans. Therefore it is important that some preventive measures are taken to enhance the resilience of project beneficiaries to such risks. The project will support preventative activities including climatic monitoring, early warning and risk mitigation measures to minimize risks of economic losses. Similarly irrigation facilities and related interventions including integration of fertilization with irrigation, artificial precipitation are also suggested for the project.

113. Once the project sub-areas and priority products to be supported are identified, the county Meteorological Bureau will be assigned with the task of implementing the related activities. The main activities to be undertaken would be as follows:
- *Climatic risks and vulnerability analysis:* CMB will undertake these analyses based on history meteorological data and other agronomic data that would be available. Product such analysis to CPMO and related agro-entities and farmers for their awareness and planning purposes;
 - *Install monitoring units:* Based on mapped risks and vulnerabilities, in consideration of the existing monitoring system, CMB will deploy additional weather and agro-met monitoring units in the vicinities to collect additional data necessary for establishing real time monitoring and improving forecast relevant for agriculture;
 - *Early warning system:* CMB will explore to establish dynamic early warning system for priority products in selected areas of the county. This will be achieved based on risk and vulnerability analysis, acquisition of dynamic weather data and technical assistance if required;
 - *Training of producers:* training and awareness building will be provided to farmers and agro-entities to enhance their access to climatic data, identification of risks and application of coping strategies.
 - *Smart agriculture:* when desire is confirmed with specific agro-entities, CMB in collaboration with CARA may also provide technical support to selected entities in their establishment of smart agricultural platform, by developing digital farm management systems to provide optimal production strategies based on dynamic climate and production correlation modules. Technical assistance from external sources may also be explored for this purpose
114. The County Agricultural and Rural Affairs Bureau in collaboration with the county meteorological administrations will implement these activities in the project sites.

Activity 2: Epidemic prevention and mitigation (SARS-CoV-2). In light of the lessons learnt from the COVID-19 shock to the project areas, the project would also support business entities on integrating preventive and control measures for SARS-CoV-2 or other zoonotic diseases, to be prepared for and mitigate similar risks that may emerge during the project life. In this regard reference documents, guidelines will be prepared which will serve as SOPS for public and private institutions in such pandemic situation.

Activity 3: Provision of other public rural services for the project target groups. In view of the expanded responsibilities of CARA to manage also rural affairs in addition to agriculture, and the emerging needs for organized services from smallholders on both agricultural and rural livelihood related perspectives, it is conducive for the project to

support and/or pilot certain type of collective services for rural communities to suit the particular demands of the counties. In this connection, opportunities offered by expanded use of internet and digital technologies will be seized to facilitate such services. The following activities will be supported to be tailored to the counties based on their particular needs:

- 1) Land management/transfer services for individual households;
- 2) Collective productive services for smallholders, such as pest management and fertilization etc.;
- 3) Piloting IT based multi-purpose rural service platform for rural communities, including among other product/marketing information and livelihood related public services. (e.g. Taoyuan County)
- 4) Other collective livelihood services maybe demanded by the beneficiaries that are closed associated with the objective of the project.

115. **Implementation Strategy and Arrangements for A.2.2 Activity:** The leading role in the implementation of these activities would be taken by PPMOs along with County Agricultural and Rural Affairs Bureau in collaboration with the county meteorological administrations for climate services part.
116. Regarding Covid-19 lessons learnt and future mitigation measures for practical and hands-on advice, county PMOs would work with the livestock and public health departments and compile a set of reference documents, guidelines and contact points for all operators in the livestock value chains. This would serve as a basis to provide specific advice or refer the business operators to the respective technical private or public institutions.
117. Regarding other public services like land management and transfers services, pest management and fertilization etc., the County PMOs will lead the process with help of CARA. These activities will be streamlined and monitored through annual participatory planning process involving the rural communities. Specific activities and budget will be reflected in the county AWPB for subsequent approval and implementation. The activities will target the beneficiaries in the project supported communities.
118. Besides the above, the project through the county PMOs would also organise and support the review and improvement of the business plans prepared by the NEE for support under Component A1. About two percent of the expected business plan investment amounts are budgeted for this review and support process.

3.1.3 Sub-Component A.3: Professional Farmer Training:

119. The project will provide incentives the county governments to give higher priority in their New Professional Farmer Training Program²¹ to women and young (and to allocate more budget resources under this program). The disbursement would pilot a result-based lending (RBL) approach. The project will disburse a prior agreed amount of resources to the counties' treasury (or project account) for each percentage point of 'increased number of women successfully trained in the program with average young age' (disbursement-linked indicators) above the 2019 baseline in each county. The agreed amount (to be negotiated and agreed during the appraisal mission) would be less than the actual training costs, but enough to provide a sufficiently attractive incentive for the counties to up-scale the program and to increase the percentage of women beneficiaries. The IFAD funds disbursed could be used for additional project activities or supplement the county Consolidate Poverty Reduction Funds .
120. **Rational:** Skills training for poor rural households has been an historically important avenue for escaping poverty in China. Recently the skills training programs have shifted from providing training for off-farm employment to providing skills for improved farming productivity and income as most surplus farmers had migrated to outside employment already. Specifically, the Ministry of Agriculture (MOA) initiated the New Professional Farmers Development Program in 2014 with the objective of making farming a more attractive profession and as a basis for local economic development. The New Professional Farmers Development Program is aligned with the local agricultural industrialization activities.
121. With the launching of the Chinese Central Government's No.1 Document on February 4, 2018 on the *Implementation of the Strategy of Rural Revitalization* it called for an accelerated effort to invest in new professional farmers as a critical step to boosting agricultural development, rural revitalization and ending extreme poverty. The document highlighted that building capacity of knowledgeable and skilled farmers is the fundamental force for improving agricultural productivity and innovation and improving the quality of rural employment. The document proposed several measures to improve the New Professional Farmers Development Program, such as supporting farmers to engage in secondary or tertiary vocational education activities on part-time basis and encouraging farmers' cooperatives and leading enterprises to provide training to its associated farm households.
122. While the program is well established and its contents is continuously reviewed and revised, the program faces three problems:

²¹ The New Professional Farmers Development Program is a comprehensive training program launched by the Ministry of Agriculture in 2014 with the objective of making farming a more attractive profession and as a basis for local economic development. The New Professional Farmers Development Program is aligned with the local agricultural industrialization activities

- 1) Coverage of the professional farmer training program. In national and provincial level poverty counties the program is implemented at the county level and funded through the Consolidated Poverty Reduction Funds (CPRF) budget with no prior earmarked funds for training. While the consolidated budget sufficiently large, most counties consider it more attractive to use the consolidated funds for more visible investments (e.g. infrastructure, housing, subsidisation of production, etc.). In 2019, the ten project counties together trained a total number of 2,250 farmers with significant variation amount counties ranging from 42 in Rucheng to 505 in Shimen county. Most counties have significant scope to enlarge the program.
 - 2) Gender Prioritisation. The outmigration of male migrant workers leaves many farm households de-facto operated by women farmers. Women not only have to do most of the physical farm work, they also have to manage the farm's business operations, decide on the choice of products, buying and selling, investment decisions, participate of manage farmer cooperatives, join meetings, etc. In turn women not appropriately prepared for these tasks are particularly vulnerable even to the point that they are giving up the land. It is therefore critical to pay specific attention involving as many women farmers in the farmer professional training program. In 2019, the average percentage of women among all project counties was 29.2%; again, with significant variation ranging from 11.3% (Shimen) to 48.1% (Daxiang).
 - 3) Age Composition. The program aims to train particularly young candidates in their 30s or early 40s. However, this is not always achieved. Professional positions in farming or along farming businesses are not considered attractive for the younger generation. This stands in contrast to the strategic objective of the rural industrialisation agenda of getting more young people back as professionals in the rural areas. In 2019, the average age of the trainees was 46 years varying between 39 years in Guzhang and 51 years in Shimen.
123. Given the fact that the training program exists and can be funded under the Government's CPRF, it is not considered efficient to use IFAD resources to set up its own project specific training program to train additional farmers, include more women or more younger people. The project would build on the Government's program and use a Results Based Lending (RBL) approach to incentivise the county Government for: a) scaling up the number of farmers participating, and getting accredited, under the Professional Farmers Training Program, by encouraging county governments to increase funding allocation for this skills training program from its CPRF budgets, b) increasing the proportion of women in the program by stepping up efforts and attract more women participating, and c) attract a higher proportion of younger people for this program. This approach would be more cost effective since the allocation of IFAD funds provided as an incentive could stay well below the actual costs of the training. The project aims to scale up the program by at least an additional 1,000 per year successfully trained New Professional Farmers, reaching a proportion of women of at

least 45% for the entire program by 2023 and lowering the average age again for the entire program to not more than 40 years by 2023.

124. Disbursement Linked Indicators:

To achieve these outcomes the project follows an RBL approach using the following three Disbursement Linked Indicators (DLIs).

125. *DLI_1 Incremental number of farmers completing the New Professional Farmer Development training program:* The DLI is defined as additional number of farmers who complete the New Professional Farmer Development Program in 10 project counties, where the New Professional Farmers Development Training Program” means the training program managed by Hunan Provincial Department of Agriculture, in accordance with the respective guidelines..

Baseline and Formula: The incremental number is calculated using the Baseline of the year 2019 and deducting the actual number of candidates successfully completing the training in any year from 2021 to 2025 minus the baseline number from 2019 in any of the 10 project counties.

Per unit value (pricing) and total value: The unit value for each additional trainee is set at US\$ 300. With an additional 5,000 trainees (over 5 years) to total expected disbursement would be US\$ 1.5 million.

126. *DLI_2 Incremental number of women completing the New Professional Farmer Development training program:* The DLI is defined as additional number of women farmers who complete the New Professional Farmer Development Program in 10 project counties.

Baseline and Formula: The incremental number is calculated using the Baseline of the year 2019 and deducting the actual number of women successfully completing the training in any year from 2021 to 2025 minus the baseline number of women trained in 2019 in any of the 10 project counties.

Per unit value (pricing) and total value: The unit value for each additional women trainee is set at US\$ 200. With an additional 2,100 trainees (over 5 years) to total expected disbursement would be US\$ 0.42 million.

127. *DLI_3: Reduced age of the trainees completing the New Professional Farmer Development training program.*

Baseline and Formula: The reduction in age if the trainees is calculated using the Baseline age of the year 2019 (number trainees in 2019 time average ager in 2019), which is deducted from the actual number of trainees times the average age in any year from 2021 to 2025 in any of the 10 project counties.

Per unit value (pricing) and total value: The unit value for each year in the total age of the trainees is set at US\$ 10. Reaching an average age of 40 years would result in total reduction of 71,500 years and the total expected disbursement would be US\$ 0.715 million.

128. The targets and expected disbursement values aggregated for the 10 project counties are shown in Table 1. Each county has individual targets based on their current situation. E.g. a county with an already large program but comparatively low proportion of women and/or high average age (e.g. Shimen) would receive less or no funds for scaling up but most or all of the funds for changing gender proportion an/or age composition.
129. *Verification protocol:* The achievement of the DLI_1, DLI_2 and DLI_3 as defined above will be recorded semi-annually by the Hunan Provincial Project Management Office (PPMO) based on reports by the project county PMOs. The PPMO will report the data to a third-party Verification Agency (VA) for verification. The verification review will be done against Program Guidelines approved by Hunan [*specific document yet to be identified*]. It will require the review of relevant training documents from randomly selected 2 counties, which will be repeated for each disbursement period for new set of counties. In each randomly selected county, the verification will then randomly select 20 percent of the reported trainees having successfully completed the *New Professional Farmer Development training program*. For each randomly selected trainees a survey will also collect household information on the following variables: gender of the head of the household, poverty status, training content, method and organization of training, process, result and usefulness of accreditation/certificate, satisfaction with the services provided, frequency and relevance of continuous support, management of the whole program. However, only the evidence on the confirmation of the person's completion of the New Professional Farmer Development Program, the gender and the age will be used to verify DLI disbursement values. The rest of the information collected from beneficiary surveys will be used for the purposes of tracking the implementation progress of the program, including the Log-Frame indicators, which will be monitored through routine supervision missions. Verification that a DLI target has been achieved would be through a *letter of confirmation to the IFAD*.
130. *IFAD Disbursement:* IFAD disbursement will be triggered by a *letter of confirmation* to be forwarded to IFAD on a semi-annual basis and supported by the corresponding list of trainees certified by the VA.
131. **Implementation Strategy and Arrangements for Sub-Component A.3:** The project would build on the Government's program and use a Results Based Lending (RBL) approach to incentivize the county Government for: a) scaling up the number of farmers participating, and getting accredited, under the Professional Farmers Training Program, by encouraging county governments to increase funding allocation for this

skills training program from its CPRF budgets, b) increasing the proportion of women in the program by stepping up efforts and attract more women participating, and c) attract a higher proportion of younger people for this program.

132. Since the design of this component was largely based on some preliminary assessment at the concept stage followed by virtual meetings/discussions during the time of COVID-19 travel restrictions, a more in-depth field based technical assessment is required. The IFAD design team would re-confirm the technical aspects of the Training Program including a review of the most recent curricula, assessment of the training institutions and interviewing selected trainees. Lists of trainees would need to be verified to confirm the baseline data. Such re-confirmation would be made conditional for disbursement under this sub-component.

133. The detailed implementation procedures would then be as follows:

DARA will:

- *Issue a guiding document* explaining the approach and guiding the counties on the implementation procedures.
- *Prepare a Recording Format* for the counties covering relevant information about the program implementation including detailed data for each of the trainees.
- *Contract a Verification agency.* The provincial PMO will prepare the TOR and recruit a third-party verification agency acceptable to IFAD, which would verify the reported information about the training program.

The county PMOs:

- *Awareness raising;* the county PMOs will raise awareness among the implementers of the training program on current shortcomings in terms of gender age and scale in their respective counties.
- *Develop strategies to address shortcomings;* the county PMOs will develop strategies and specific measure to reach out and encourage more women and more younger people to enroll in the training program.
- *Reporting successful trained participants;* the county PMOs will report all trainees, which have successfully concluded the training confirmed by certificate to the PPMO, which in turn will inform the VA and request verification.

Verification Agency:

- *Field verification:* The verification review will be done against Program Guidelines approved by Hunan [*specific document yet to be identified*]. It will require the review of relevant training documents from randomly selected 2 counties, which will be repeated for each disbursement period for new set of counties. In each randomly selected county, the verification will then randomly select 20 percent of the reported trainees having successfully completed the *New*

Professional Farmer Development training program. For each randomly selected trainees a survey will also collect household information on the following variables: gender of the head of the household, poverty status, training content, method and organization of training, process, result and usefulness of accreditation/certificate, satisfaction with the services provided (this will be tracked also as an indicator of citizen engagement), frequency and relevance of continuous support, management of the whole program. However, only the evidence on the confirmation of the person's completion of the New Professional Farmer Development Program, the gender and the age will be used to verify DLI disbursement values. The rest of the information collected from beneficiary surveys will be used for the purposes of tracking the implementation progress of the program, including the Log-Frame indicators, which will be monitored through routine supervision missions.

IFAD Disbursement:

IFAD disbursement will be triggered by a *letter of confirmation* to be forwarded to IFAD on a semi-annual basis and supported by the corresponding list of trainees certified by the VA.

3.2 Component B: Climate-proofed Public Infrastructure and Improvement of Rural living Condition:

134. **Rational:** The H2RDP project area target four prefectures and ten counties declared as poor counties in Hunan Province. The common characteristics of these areas are low and middle mountains and hilly terrain topography, subtropical monsoon humid climate, comparatively rich precipitation. Elevation level ranges from 40 meter to 2200 meter above the sea; and average annual precipitation ranges from 1200 mm to 1,500 mm. The rainfall mainly occurred from April to August, which accounted for 63% of total precipitation of the whole year. Rainfall in spring and summer occupied 36% and 35% of the annual precipitation while 17% and 12% in autumn and winter. Uneven rainfall distribution within the year and between years, seasonal water shortage and droughts are a common phenomenon. Shaodong county, Longhui county and Daxiang county, which are located in the drought corridor of Heng-Shao²², are more seriously short of water. Underdeveloped infrastructure systems, especially rural roads, agriculture water management systems, have been one of the major constraints to local agriculture and rural development.
135. Benefited from increased government investment in the past decades, including implementation of the Plan on Poverty Alleviation, local major public infrastructure systems have been largely improved in recent years, especially backbone hydraulic engineering, county and township level drinking water supply systems, and rural roads connecting administrative villages and townships with external networks. However, development of village level public infrastructure systems is still lagging behind, especially, the lack of irrigation engineering for cash crop planted in the hills and mountains and production roads in the farm and roads connecting farm and village.
136. As summarized in Table 7, Average about 57% of village are in lack of connecting roads to production field, and about 39,675 village farmers and 206,915 animals are lack of enough safe drinking water or not reach to standard. There is an urgent need to improve rural roads, and complete water supply systems in these areas in order to meet the demands of agricultural production, poverty reduction and livelihood improvement.
137. Local agricultural production requires both supplementary irrigation. The cultivated land area of the whole province is 62.3 million mu, and the irrigated area is 46.7 million mu, among which the area of sprinkler and micro-irrigated area is only 240,000 mu. Rice and other field crops use traditional surface irrigation. Irrigation water from reservoirs or DAMS and other water sources. Traditional surface irrigation increases

²² Heng Shao Drought Corridor Comprehensive Management Plan. Hunan Provincial Development and Reform Commission, Hunan Water Resources Department, August 2012

the consumption of water resources²³. At the same time, the excessive application of pesticides and fertilizers has led to the aggravation of agricultural non-point source pollution.

138. Due to underinvestment in the past decades, water storage and delivery systems are limited, especially for cash crops and fruit trees. As summarized in Table 1, only average 61% (25% to 87%) of the cultivated lands are irrigated in the targeted counties, which is much lower than the provincial and national average. The limited existing water storage and irrigation systems are mainly developed several decades ago, facing some common issues in degraded water storage capacity, deteriorated water delivery and control systems, and low system performance. Associated drainage systems are either incomplete or deteriorated. These impose an urgent need in completing and improving irrigation and drainage systems in order to better meet the requirements of agricultural production and agribusiness development.

Table 7. Status of Public Infrastructure System in the Project Counties

County (District)	Farmland and irrigation area			Rural Roads		Water Supply	
	Total cultivated land area (ha)	Percentage of slope land (%)	Functional irrigation areas (%)	Village lack of connecting roads to production base (%)	Village lack of connecting roads (%)	Number of population lack of access to safe drinking water (not reach to standard) persons	Number of animal lack of access to safe drinking water (heads)
Changde City							
Taoyuan	96396	15	87	48	3	67	141680
Shimen	48566	31	75	50	70		
Xiang Xi Prefecture							
Guzhang	10450	65	46	43	23	5766	3500
Fenghuang	40640	38	25	66	10	3360	8340
Luxi	22500	17	67	19	13	13435	19360
Longshan	34180	13	63	52	10		6892
Shaoyang							

²³ Implementation Plan for an Additional 1.5 million mu of High-efficiency Water-saving Irrigation Area during the 13th Five-year Plan Period of Hunan Province, Hunan Water Resources Department, 2017

City							
Shaodong city	59986	46	36	70	20		
Daxiang	6707	20	80	70	10		
Longhui	73875	52	55	70	40	15247	26143
Chenzhou city							
Rucheng	26852	40	68.5	80	5	1800	100
Total (or average)	420152	34	60	57	20	39675	206915

139. Development and management of rural infrastructure systems, especially irrigation and drainage systems, drinking water supply systems, rural roads, environmental protection and ecological conservation, has been identified as one of the major supporting pillars to sustainable agricultural development, poverty reduction and climate change adaptation in China.

Infrastructure Development Challenges:

140. Major challenges to village infrastructure development and improvement identified in the project area include: (i) limited financial capacity of local government and communities; (ii) limited local capacity in climate change mainstreaming; (iii) limited institutional capacity for sustainable O&M of infrastructure systems; and (iv) limited technical capacity of beneficiary villages and farmers in infrastructure O&M and agriculture water management. Government investments have been focusing on external major infrastructure systems in the past decades, leaving village level infrastructure systems lagging behind. Where the major systems have been developed and improved in recent years, the government is now promoting completion and upgrading of downstream and village level systems. But the financing gap is large and external assistance is urgently needed. Limited local capacity in climate change mainstreaming, infrastructure operation and maintenance, and agriculture water management has been evidenced by poor system planning, engineering design and low performance of existing systems in the project area. Proper mechanism for sustainable O&M of infrastructure systems is not yet in pace in many circumstances. Farmers have not sufficiently participated in infrastructure development and management. Although road management groups or water users associations (WUAs) have been established at some places, very often, they are not well functioning. Water fees collected at existing irrigation systems are not sufficient to cover the full O&M cost. These hampered

sustainable functioning of irrigation systems. It is therefore needed to mobilize external technical financial assistances.

Infrastructure Development Opportunities

141. The current government strategy and action plan is very clear that by end of 2020 extreme poverty in its all manifestation will be eliminate through targeting the poor area. The emerging needs on agribusiness development and climate change mainstreaming placed a high demand on village infrastructure development and improvement particularly in the wake of Government high priority flagship program ‘rural revitalization strategy’. Improved national economic condition enabled more financial resources from central and local governments. National and provincial wide infrastructure improvement programmes implemented in recent years have largely improved the external infrastructure networks, and made further improvement at village level possible and urgent. The on-going government initiatives on small-scale infrastructure management reform enabled favorable policy environment for establishment and strengthening of management organizations. Domestic and international programmes and projects implemented in recent years generated good experiences in village infrastructure improvement.

Objective

142. This component aims at improving common/village infrastructure, access to climate change adaptation/mitigation best practices in the targeted programme area through a combination of physical improvement, institutional strengthening, technical assistance and policy advisory, in order to promote sustainable, climate resilient agricultural production, to support the Government in consolidating its achievements in poverty eradication and to implement rural revitalization strategies.
143. This component will address some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities. Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options - and plan and decide accordingly, and improving the climate-resilience of the infrastructure system.
144. The above objective is based on local conditions and needs, and in line with the government strategy on poverty reduction and rural revitalization. It contributes to the overall project development objective of “enhancing the income generating opportunities in the project area, and the inclusiveness of the benefit-sharing mechanisms, through the improvement of the government's existing and the piloting of

new delivering mechanisms.”, and is in compliance with the overall goal and strategic objectives of the IFAD COSOP in China (2016-2020).

Strategy and Approach

145. In achieving the above development objective, the following strategies and approaches were considered and adopted in project design: (i) comprehensive strategy, through combination of physical, institutional and technical options; (ii) integrated approach, to integrate infrastructure options with agricultural options and inclusive rural development; (iii) climate-smart approach, to mainstream climate change adaptation and mitigation into infrastructure system planning, engineering design and operation and management; (iv) participatory approach, through establishing and strengthening infrastructure management organizations to better involve beneficiary farmers into infrastructure planning, design, construction and O&M; and (v) building partnership with government initiatives, through completing with on-going and planned government investment strategies and programs.
146. **Scope of Component B:** Associated to the value-chain infrastructure requirements identified and supported in component A, this component will address gaps in the current infrastructure which may limit or constrain the implementation of the project activities. Improvement of the infrastructure system will be achieved through a combination of physical improvements, institutional strengthening and technical assistance, which will also result in a reduction of the risks and the impacts associated to changing weather and climate conditions, and a more sustainable and climate resilient agricultural production. This component is organized along two sub-components:

Sub-component B.1: Improving Climate resilience infrastructure, and

Sub-component B.2: Improving rural infrastructure system.

3.2.1 Sub-component B.1: Improving Climate resilience infrastructure:

147. This sub-component will support the development and improvement of climate-resilient infrastructure systems in the project area including improved climate-risk assessment, planning and decision-making and Piloting Climate adapted Smart irrigation. All infrastructures supported under this sub-component will be climate-proofed. Key activity under this sub-component include piloting climate-proofed smart Irrigation investment

B.1.1 Piloting climate-proofed smart Irrigation investment:

148. All the counties in programme areas lack climate-proofed smart irrigation water supply systems and on-farm irrigation, or the existing systems are deteriorated, with limited

water supply reliability and delivery efficiency. This activity would support improvement and development of irrigation water supply systems, including rehabilitation and development of water source structures (water pools, water ponds) and pump station and canals, pressure pipelines, and demonstration of piloting climate proofed irrigation in the field, including sprinkler and drip irrigation systems, advanced fertigation system demonstration. These interventions would contribute to enhancement of agricultural productivity, agriculture diversification, climate resilience and farmers' income generation.

149. This activity would support rehabilitation and development of 174 km canals, 56 km pressure pipelines, 24 pumping stations, 7521 head control and system, 108 water pond, 130 water cellar, 305 water pool, 136 culvert, 82 retaining dam, 30 aqueduct, 141 sluice, 83 bridge and 59.9 km drainage ditch. These interventions would develop and improve 7219 ha irrigation area distributed 111 village in 60 townships, see Appendix 5, hence contribute to agribusiness development and poverty reduction in the project area, through enhancing agricultural productivity, agriculture diversification and climate resilience.
150. Total base cost of this activity is estimated as USD 16.997 million, which will be shared between IFAD Loan (13.103 million) and Government co financing (3.894 million). Cost estimates for improvement and development of irrigation are based on data provided in the programme proposal prepared by the government and field verification conducted during the detailed design missions.
151. Ownership of the irrigation systems and the water source facilities improved and developed under the project will belong to the beneficiary villages, water users' associations or farmers' cooperatives depending on the decision made by respective county project management offices during the project implementation, based on the size and benefiting scope of the systems. Improved and developed irrigation and drainage systems will be handed over to the identified owners at the completion of construction, who will be responsible for O&M of the systems, with continuous technical and financial supports from government departments and respective irrigation management agencies.
152. The O&M associations/group like WUAs in areas of water scarcity will be trained in adaptive water management for water use efficiency under different climate conditions and supported in the installment of a network of digital water meters in strategic places in the irrigation system and in the design of an instant water flow data registration and analysis system. The data on water flows will be combined with data collected on temperatures influencing crop water needs, crops and varieties cultivated in the various fields, their yields and type of irrigation equipment used. This will allow for monitoring

and analysing water productivity and water use efficiency throughout the irrigation system and for implementing improved and adaptive water management and use efficiency.

3.2.1 Sub-component B.2: Improving Public Rural Infrastructure system.

153. This sub-component will address some of the major gaps in the current infrastructure system in the project area, which may limit or constrain the implementation of the proposed project activities, and - in the case of water source facilities - help reducing the vulnerability to the impact of climate change: incomplete rural road network, underdeveloped and/or deteriorated irrigation and drainage systems, lack of drinking water and/or electricity supply facilities, segmented and sloping agricultural land, etc. All infrastructures supported under this sub-component will be climate-proofed. Key activities under this sub-component include:

Activity B.2.1: Development and improvement of rural roads (Base Cost: USD 29.795 million)

154. Some of the programme areas are in lack of roads between villages or linking villages with production areas and field roads. This activity would support development and improvement of village roads and production roads, which will serve both the agribusiness entities and village farmers. This activity would support development of 192 km village roads, 267 km production roads, 192km earth roads, see Appendix 4-1. These interventions would improve road access and hence serve both the agribusiness cooperatives and other local farmers in 106 villages located in 59 project townships, , see Appendix 5.
155. Total base cost of this activity is estimated as USD 29.795 million, which will be funded by Government co-financing. Cost estimates for rural roads are based on data collected during the detailed design. These are subject to adjustments during project implementation.
156. Ownership of the on-farm roads improved under the project will belong to the beneficiary villages, who will be responsible for O&M of these road systems with continuous technical and financial supports from government transportation department.

Activity B.2.2: Development and improvement of safe drinking water supply systems (Base Cost: USD 4.104 million)

157. Farmers in some of the programme area are facing difficulty in accessing safe drinking water. This activity would support rehabilitation and development of water supply

pipelines. These interventions would bring safe drinking water access to rural population and animals.

158. This activity would support development of 91 km water pipeline and 47 water source engineering (small reservoir). These interventions would enable easy access to safe drinking water for a total of 97705 rural population and 106543 livestock in the 75 project villages in 38 townships.
159. Total base cost of this activity is estimated as USD 2.54 million, which will be all funded by Government co-financing. Cost estimates for development and improvement of safe drinking water supply systems are based on data collected during the detailed design, which is subject to adjustment during project implementation.
160. Ownership of the safe drinking water supply systems improved and developed under the project will belong to respective beneficiary villages, who will be responsible for O&M of these systems with continuous technical and financial supports from government departments.

Activity B.2.3: Improvement and extension of power supply systems (Base Cost: USD 0.209 million)

161. Some of the project villages are lack of power supply facilities. This activity would support 12 km extension of electricity lines to village farms and agribusiness entities and 5 transformers. These interventions would bring enable electricity supply to irrigation systems, agro-processing plants and rural households in 18 project villages in 11 townships.
162. Total base cost of this activity is estimated as USD 0.209 million, which will be all funded by Government co-financing. Cost estimates for electricity supply systems are based on data collected during the detailed design. These are subject to adjustments during project implementation.
163. Ownership of the electricity supply systems improved and developed under the programme will belong to the beneficiary villages, who will be responsible for O&M of these systems, with continuous technical assistances and supervision from local electricity agency.

Activity B.2.4: Land preparation (Base Cost: USD 8.703 million)

164. Some of the farmlands in the programme areas are sloping lands, segmented, unlevelled or unprotected with serious water and soil erosion. This activity would

support land levelling in order to enable safe and productive farming, soils and water conservation. This activity would support development of 1527 ha land levelling and 286 ha terracing of cultivated sloping land. These interventions would benefit 35896 rural HHs in 71 project villages in 36 townships.

165. Total base cost of this activity is estimated as USD 8.703 million, which will be all funded by Government co-financing. Cost estimates for land preparation are based on data collected during the detailed design. These are subject to adjustments during project implementation.
166. Ownership of the farmland terraced and leveled under the project will follow the existing land tenure arrangements governed by government policies and guidelines. Beneficiary farmers will be responsible for sustainable management and use of land resources under their respective tenure, with continuous technical and financial supports from government transportation department.

Activity B.2.5: Environmental improvement (Base Cost: USD 9.949 million)

167. This activity would support 12.95 km ecological interception ditch, 859 farmland waste recycling pool, 3707 street lamps, 1044 domestic sewage purification pool, 355 public domestic waste collection pool, 120 ecological pond, 53500 m² constructed wetland.
168. Total base cost of this activity is estimated as USD 9.494 million, which will be all funded by Government co-financing. Cost estimates for land preparation are based on data collected during the detailed design. These are subject to adjustments during project implementation.

Activity B.3: Support to infrastructure O&M and design (Base Cost: USD 0.896 million)

169. Public infrastructure systems need relevant institutional arrangement, proper mechanism and suitable capacity for sustainable O&M after completion of construction, which have not been in place in the project area. This activity would support: (i) establishment and strengthening of O&M organizations, including water users' associations and other infrastructure management groups, through procurement of office furniture and equipment, and organization training on infrastructure O&M for management groups and beneficiary farmers; and (ii) implementation of normative O&M activities during the project life time. These interventions will result in establishment and operationalization of 120 infrastructure O&M organization, and hence contribute to sustainable infrastructure O&M; and (iii) Design, supervision and tendering costs.

170. Total base cost of this activity is estimated as USD 0.896 million, which will be all funded by Government co-financing. Cost estimates for these interventions are based on data collected during the detailed design, which are subject to adjustment during project implementation.

Implementation Arrangement of Component B.

171. These activities will be implemented at selected sites in the project counties in Hunan Province, based on local infrastructure constraints and the project agribusiness development needs. The Provincial Project Management Office (PPMO) will be responsible for overall supervision and coordination. Its sub-ordinate offices at prefecture level will be responsible for direct supervision and coordination of sub-component activities within their respective prefectures. The sub-ordinate offices at county level will be responsible for detailed implementation of sub-component activities within their respective counties.
172. Specific interventions initially identified under this sub-component are subject to further confirmation and adjustments during the project implementation, following the same selection criteria applied during the project preparation: (i) compliance with relevant government policies, plans and guidelines; (ii) contribution to achievement of the programme objectives; (iii) availability and good potential for land and water resources development; (iv) readiness of external major infrastructure systems/networks; (v) willingness of local villages and beneficiaries to take over O&M responsibilities; (vi) technical, economic, social and environmental feasibilities; (vii) incorporation of climate change conditions; and (viii) reasonable scope and cost considering the overall project size.
173. System planning and engineering design of the proposed infrastructure systems will follow the technical guidelines issued by relevant government agencies. Close cooperation will be established with county bureaus of agriculture, water, transport and power, environmental protection agency in order to ensure their compliance with government strategies and policies. Qualified experts will be mobilized for technical assistance and training. Procurement of civil works, goods and services will follow relevant government and IFAD guidelines and processes. Suitable infrastructure management organizations will be identified/established before the commencement of each infrastructure improvement work, sufficiently involved in the whole process of system planning, design and construction supervision, and take over the O&M responsibility after completion of construction.
174. Special attention will be paid to government and IFAD environment safeguard policies during system planning and engineering design, to avoid any major negative environment impacts. Specifically, the following interventions would be excluded: (i)

large-scale dam/reservoir construction, with more than 15-metre high wall, more than 500-metre long crest, and/or with a reservoir exceeding 3 million m³ capacity or incoming flood of more than 2,000 m³/s; (ii) rehabilitation or development of large-scale irrigation schemes, with command area above 100 ha; (iii) construction of rural roads that entail the total area being cleared above 10 km long, or any farmer with more than 10 % of his/her private land taken; (iv) drainage or correction of natural water bodies (e.g. river training); and (v) significant extraction or diversion/containment of surface water leaving the river flow below 20 per cent environmental flow plus downstream user requirements.

175. A step-wise participatory process will be adopted for implementation of this sub-component, including: (i) participatory need assessment on infrastructure development based on local development plans on poverty reduction, agriculture production and their requirements on infrastructure services; (ii) identification/establishment and training of infrastructure management organizations; (iii) system planning, engineering survey and design of infrastructure systems; (iv) consultation and finalization of system planning and engineering designs, including discussion and agreement on the O&M responsibilities of infrastructure management organizations; (v) implementation of construction and supervision; (vi) inspection of construction completion and handing-over of O&M responsibilities to infrastructure management organizations; (vii) implementation of normative O&M by infrastructure management organizations; and (viii) facilitation of women's involvement in each of the above steps.
176. Sustainable and climate-smart approach will be mainstreamed at each phase of the project cycle. During preparation, the impacts of climate change on water availability, water demands, flood and drought frequency and intensity will be assessed and incorporated into system planning. During implementation, suitable adaptation and mitigation options will be incorporated into system design and O&M, including adopting adaptive technical models and engineering design, applying energy-saving technologies and equipment, and supporting capacity building on effective water resources management. During evaluation, climate change related indicator, such as coverage of irrigation service, irrigation efficiency and reliability will be carefully evaluated and reported. Costs for environment protection and soil and water conservation during the implementation of infrastructure interventions have been estimated and budgeted following the requirement of relevant government policies. Environmental-friendly practices will be adopted during construction to avoid and mitigate potential negative impacts, including assessment of environmental impacts before implementation, and protection of trees and vegetation.
177. Fertigation system integrated water and fertilizer application through drip irrigation is a climate smart irrigation, water-saving and fertilizer saving technology. it is new

technology in the project counties and should be demonstrated. The applicable technology model and management model should be summarized for replication and promotion in other areas.

Risks and Mitigation Measures:

178. The activities under the project may have potential risks to the environment. The increased production with inadequate practices may increase soil erosion, pollution from agrochemicals and waste from processing activities. Improvement or new development of irrigation schemes may impact on water ecological systems from overuse of the water source to the downstream areas. Furthermore the project, if not carefully managed, may trigger conversion of forest land to reservoirs and pumping stations. Inappropriate O&M of infrastructure systems resulted from inadequate institutional capacity; damage of infrastructure systems due to floods, landslides or soil erosion; and inefficient use of irrigation water due to inappropriate irrigation practices. Therefore proper planning and mapping of infrastructure development are very essential. Moreover the project should closely monitor the potential environment impacts of the project during the implementation. The project designed activities on: incorporating climate change considerations into infrastructure improvement to enhance the resilience to nature disasters and climate change impacts; identification/establishment and strengthening of infrastructure management organizations to enhance institutional capacity in infrastructure O&M; and technical training to disseminate water-saving irrigation technologies. Possible risks and measures for mitigation see ESMP.

3.3 Component C: Project Management, Knowledge Management, M&E, and Policy:

179. This component will support the planning, coordinating, monitoring, reporting and overall management functions of the project management offices (PMOs) at provincial and county level. Some important partnerships are foreseen with IFAD champions like the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) for the provision of support in monitoring and evaluation functions, knowledge management, and policy engagement.

Regarding strengthening the gender transformation of the project, policy engagement on Gender Equality and Women Empowerment GEWE will be conducted with support of AII-CAAS. For detail please consult subsequent chapters of PIM.

Component A**181. Attachment 1: Eligibility Checklist for Farmer Professional Cooperatives:**

The following checklist would be used for the initial certification of a pro-poor farmer professional cooperative. Other parameters indicate the standards for continuing operations of the cooperatives. All indicators would be continued to be monitored of the performance of pro-poor cooperatives. If the essential compliance parameters are met a cooperative would also be eligible for further support under the project (e.g. for co-financing partners).

Grade I indicator	Grade II indicator	Contents and Criteria for assessment	Entry required
Operational setup	(1) Registration compliance	Registered in industrial and commercial management department according to laws, with full set of lawful charters, business license, organization code certificate, tax registration certificate, bank account opening permit etc.	Yes
	(2) Membership composition	Not less than 20 members with a detailed list of membership information (including name, gender, ID number, profession, home address, poverty status, percentage of share, contact information etc.), members should mainly be farmers, farmer members account for at least 80% of the total number of members, other members such as enterprise, institute, or social group should not be more than 5%; above 30% of the coop members shall be archived poor households or above 40% of the total archived poor households in the village are members in the cooperative.	Yes
	(3) Capital confirmation	With a capital contribution list signed (stamped) by contributive members, all members shall provide capital lawfully as specified in the charters.	Yes
	(4) Share composition	With clear list of shares, farmer members shall hold at least 60% of the shares, shareholding ratio of all members shall add up to 100%.	Yes
	(5) Profit distribution	With clear written profit distribution plan. The profit distribution plan shall be defined by Charters or by resolutions from members (representatives) meeting.	Yes
	(6) Environment standards	Follow GAP, i.e. to follow national standards and good practice relating to agriculture waste management, water and soil control and water resources management, resources recycling, chemical fertilizer application reduction and other sustainable and climate smart agriculture/livestock sector practice and technology.	No
Financial	(7) Staffing	Equipped with special financial staff or entrust rural business	Yes

managem nt		management organization or bookkeeping agency for bookkeeping, accounting.	
	(8) Financial software	Using computerized financial software for bookkeeping.	Yes
	(9) Financial records	Carry out financial information recording and update on timely basis according to financial management requirements.	No
	(10) Financial reporting	With annual financial statements, including members' equity changes, P/L, statement of surplus distribution, Balance sheet etc., to be reviewed by the Supervisory Board and referred to by the members.	No
Informatio n disclosure	(11) Regular meetings system	Members (representatives) meeting, Management Council, Supervisory Board are well set up and in effective operation according to laws, with signatures and meeting records of the held "three meetings".	Yes
	(12) Coop affairs disclosure	Timely publish cooperative affairs information including finances, meetings, assets and profit and loss etc..	No

182. **Attachment 2: Annotated Outline of the Business Plan:**

Each Business Plan (investment proposals) should follow a common outline and be presented in a paper with a length of 10 to 15 pages plus annex tables and should cover the following sections:

- 1. Proposing Unit:** (all information provided here should refer to the existing situation and not to future plans)
 - 1.1. Name of the Cooperative
 - 1.2. Village(s)
 - 1.3. Date of registration
 - 1.4. Current business activities (please indicate the main business activities of the proposing unit, type of business, size of operation including volumes of products produced/traded/processed during the past years, main area of operations (e.g. township, county, national, etc.;
 - 1.5. Current financial situation (registered capital, annual turn-over, annual profits, existing loans incl. types and maturity, dept/equity ratio, etc.)
 - 1.6. Current business relationships (in what way is the proposing unit already linked to down- and up-stream partners such as formal or informal contracts with farmers or farmer cooperatives, who are the major buyers/processors, ,

- 2. Background Situation of the Related ‘Industry’:** Explain the relevant background situations related to the proposed investment. Current production/trading/processing arrangements, technologies, etc. What is wrong or inefficient with the current situation, in particular in terms of technologies, organizational arrangements, benefit sharing in the value chain, etc. Are there any market failures preventing the private sector to develop the proposed production system?

- 3. Objective and Targets of the Proposed Investment:** This section should explain what is going to be achieved with the proposed investment and how the achievement would be measured. The objective and targets should be concrete, measurable and in particular realistic: e.g. ‘the net production value would be increased by xxx million RMB, this incremental production value would be shared between the enterprise and the farmers with the farmers receiving at least xx% of the incremental value’. It is important that the objective and targets are realistic. They will be monitored, and the investment will be considered a failure, if the objective is not achieved, in which case financing will also be stopped.

- 4. Rational of the Proposal:** This section should explain why this specific investment is necessary, what would happen without the project, what alternatives have been considered and why can’t the above stated objective not be achieved without implementing this investment in the proposed way.

5. Main beneficiaries:

- 5.1. Direct Beneficiaries: Who would directly benefit from this investment? Farmers? Company? Cooperative? How many farmers? How would poor farmers be targeted? What poor farmers would directly benefit from the investment?
- 5.2. Indirect Beneficiaries: What other benefits are expected from this investment and who would indirectly benefit? In what way

6. Description of the Investment: This section should provide a detailed description of the proposed investment activities; this section should explain how the money would be used, who would be the owners of each of the investments and who would have the responsibilities for operation and maintenance (e.g.: farmers, cooperatives, enterprises, etc.); the section could be structured as follows:

- 6.1. Investment in Production Facilities, type, areas (mu), households (No.),
- 6.2. Investment in Processing and Marketing facilities, type, size, location, etc.
- 6.3. Investment in Other Infrastructure, type, size, location, etc.
- 6.4. Investment in Services and Training, including who is providing services and training, contents, timing, number of households receiving services/training, etc.
- 6.5. Investment in Other Activities, please describe here any other proposed investments not covered already in the above sections.
- 6.6. Detailed Cost Tables, Following the same structure above (6.1. to 6.5.) a detailed cost table should be presented showing all investment activities, units, quantities, unit costs and total costs. The format for the detailed cost table, which needs to be used, is attached (Attachment 1).

7. Financing Arrangements: A table should be provided here showing the proposed financing arrangements for each investment activity (see Sample Table: Attachment 2)

8. Organizational Arrangements: This section should describe the proposed organizational arrangements; what steps have already been taken and what steps will be implemented to achieve these organizational arrangements. It should cover such items as formations of farmer groups/cooperatives, contractual arrangements among farmers or between companies and farmers, services agreements, land leasing/contracting, etc. Evidence of organizational arrangements (e.g. copies of contracts, registration of cooperatives, etc.) should be provided in an attachment to the proposal).

9. Cash flow and financial analysis. To understand whether the proposed investment is really profitable and competitive a detailed cash flow and financial analysis needs to be

provided separately for each major stakeholders in the value chain. This needs to include crop or livestock models at the farm level (example tables are provided in Attachment 2) and cash flow analysis at the company/enterprise level (details will be explained at the project preparation workshop). It is very important that the assumptions used in the crop models and business cash flow tables are realistic reflecting the true field situations. Many yield and price assumptions used by the Governments are highly optimistic as they refer to best case scenarios and do not reflect average field observations. This is not acceptable as such false assumption expose farmers to high risks.

10. Benefit Sharing and Poverty Impact. This section should quantify the benefit sharing between different stakeholders and the impact, which the proposed investment would have on poverty alleviation.

11. Market analysis and comparative production cost analysis. Each of the proposals promoting the development or expansion of a product/industry need to be supported by a detailed market analysis showing where the markets for the product are and what quantities these market are likely to absorb at what prices. This needs to take into account developments in other production areas. Often the same product is also expanded in other areas. To assure longer term competitiveness of a product the production costs in the main producing areas should be compared with the production costs in the project areas (comparative production cost analysis). If the production costs in other main producing areas are significantly lower, it must be assumed that these areas will expand production and out-compete the produce from project areas.

12. Safeguards. This section should assess all potential environmental and social safeguards aspects of the proposed investment and proposed mitigation measures in case of any negative impacts.

Environment: For proposals involving agro-processing the national standards and approval requirements need to be stated. In case of approvals already granted (e.g. by the environmental protection bureaus) copies of the approval should be attached:

- Whether the proposal meets the sub-project screening standard for environment management?
- Whether the proposal meets the location screening standard for environment management?
- If the proposal has included environment impact assessment, please attach the Chinese version of the environment impact assessment report.

- If the proposal has been cleared by the local environment evaluation authority, the approval document by county or city environmental production bureau should be attached.
- The county PMO need to provide the review, approval opinion and conclusion to the proposal (cleared, rejected or resubmitted for review and approval after revision) from the perspective of environment safeguard based on the above mentioned four points.

Social Safeguard (In compliance with relevant stipulations of the Environmental and Social Management Plan of the project).

i. Land Issue. In case the project involves land issue, explanation should be given to specify the land scale (mu), land source (land adjustment or acquisition). For new land acquisition, the time of acquisition by the village or town should be specified. In case of land adjustment after consultation, all the procedures should be in place with documentation of the village committee meeting minutes (with seal of village committee) for voluntary land adjustment, and the commitment letter with villagers' thumb print (archives for check)

ii. Number of Project Beneficiaries (specify the number of cooperative farmers and that of non-cooperative farmers). Number of project poor household (specify the number of poor households and poverty probability in the project area, the number of poor households joined in the cooperative and its proportion to the total number of the poor households in the project area).

iii. Ethnic Minority Population. The participating minority people group, number as well as the name and number of main minority groups in the project area. Included are the following:

- The proportion of minority people to the total population in project area.
- The proportion of participating minority people to the total of minority people in project area.
- The proportion of minority people in the managerial staff of the cooperative.
- Women participation (specify the proportion of women in the managerial staff of the cooperative). Emphasis should be made to allow women's voice be heard (with actions arranged). In particular, how to bring into full role of women in management and operation?
- Capacity building & training. Specify training plan, contents, arrangement and number of trainees. Efforts should be made to ensure equal participation of women and minority group.

iv. Number of cooperative managerial staff to be trained, including

- Number of women trained and proportion.
- Number of minority group trained and proportion.

v. Number of farmers to be trained, including

- Number of women trained and proportion.
- Number of minority group trained and proportion.
- Number of poor households trained and proportion.

vi. Cooperative and Project Management Experience Sharing. Part of the cooperative development fund should be allocated for the peer training (referring to the training of county PMO staff, the cooperative chairman, or managerial staff, facilitator, farming and livestock technical smart person).

Appendix Table 1: Format and Example for Detailed Cost Table

2021-2025 Investment Plan for XXX Farmer Cooperative

Unit: thousand yuan

Project Activity		Cost Estimate by Year							Base Cost by Year						
		Unit	2021	2022	2023	2024	2025	Total	Unit Cost	2021	2022	2023	2024	2054	Total
I. Investment Cost															
1.Establishment of Cooperative															
1.1	Office	M ²													
1.2	Equipment	Set													
1.3	Office Furniture	Set													
Sub-total															
2.Development of Cooperative															
2.1	Farming (Livestock)	mu (head)													
2.2	Nursery	mu													
2.3	Greenhouse	M ²													

2.4	Seedling	ten thousand pieces													
2.5	Supplementary Fertilizer (Organic Fertilizer)	ton													
2.6	Sticky plates as Insect Trap	ten thousand pieces													
2.7															
2.8															
Sub-total															
3. Value-added Incremental															
3.1	New Water Tank	M ³													
3.2	Cold Storage	M ³													
3.3	Extension of Processing Plant	M ²													
3.4	Setting up of Internet	set													
3.5	Machinery Equipment	piece													
3.6	Processing Plant Equipment	piece													
3.7															
Sub-total of Value-added Incremental															

4. Market Survey and Development															
4.1	Agro-market	piece													
4.2	Trading Market														
4.3	Brand Verification, Development and Promotion														
4.4	Food Safety Test														
4.5		piece													
4.6															
Sub-total of Market															
5. Technical Support															
5.1	Hiring of Technical Experts	Person/days													
5.2	Test and Identification of Products	Person/days													
5.3	Peer Training	Person/times													
5.4	Study Tour to Main Markets	Person/years													
5.5															
Sub-total															
6. Risk Prevention and Mitigation															

6.1	Insurance														
6.2															
Sub-total															
7.Stand-by Investment		2~3 years													
7.1	20%—30%														
8.Enterprise Investment															
8.1	Plants and Buildings	total													
8.2	Testing Lab	total													
8.2	Boiler	total													
8.3	Equipment														
8.4	Others														
8.5		total													
Sub-total of Enterprise Investment		total													
		total													
II. Other Costs															
1	Labor	number													
2	Farm Manure	ton													
3	Self-raised by Cooperative Members														
4	Management Cost														
5	Operational Cost														
Sub-total of Other Costs															
Total of Investment															

Commitment of Cooperative	The cooperative development and investment plan has been discussed and confirmed by the cooperative assembly and opened to the public.
	Witness Signature of Cooperative Assembly of Board Directors and Supervision Members:
	Cooperative Facilitator Signature:
	Cooperative Seal:
Opinions of Technical Advisory Group	Signature/Seal of Reviewer (Expert) : Day Month Year
Opinions of County PMO	Seal of County PMO : Day Month Year

Appendix Table 2: The Financing Arrangement of xxx Farmer Cooperative

Unit: Thousand Yuan

Project Activities		Total Cost						Total Financing (RMB 000')
			IFAD	Cooperative	Enterprise	Farmer	Other (Please Specify)	
I. Project Investment Cost								
1. Establishment of Cooperative								
1.1	Office							
1.2	Equipment							
1.3	Office Furniture							
Sub-total of Establishment								
2. Development of Cooperative								
2.1	Farming (Livestock)							
2.2	Nursery							
2.3	Greenhouse							
2.4	Seedling							
2.5	Supplementary Fertilizer (Organic							

	Fertilizer)							
2.6	Sticky Plates as Insect Trap							
2.7								
2.8								
Sub-total of Development								
3. Value-added Incremental								
3.1	New Water Tank							
3.2	Cold Storage							
3.3	Extension of Processing Plant							
3.4	Setting up of Internet							
3.5	Machinery Equipment							
3.6	Processing Plant Equipment							
3.7								
Sub-total of Value-added Incremental								
4. Market Survey and Development								
4.1	Agro-Market							
4.2	Trading Market							
4.3	Brand Verification, Development and							

	Promotion							
4.4	Food Safety Test							
4.5								
4.6								
Sub-total								
5. Technical Support								
5.1	Hiring of Technical Experts							
5.2	Test and Identification of Product							
5.3	Peer Training							
5.4	Main Market Survey							
5.5								
Sub-total								
6. Risk Prevention and Mitigation								
6.1	Insurance fee							
6.2								
Sub-total								
7. Stand-by Investment								
7.1	20%—30%							
8. Enterprise Investment								

8.1	Plants and Buildings							
8.2	Testing Lab							
8.2	Boiler							
8.3	Equipment							
8.4	Others							
8.5								
Sub-total of Enterprise Investment								
II. Other Cost								
1	Labor							
2	Farm Manure							
3	Self-raised by Cooperative Members							
4	Management Cost							
5	Operation Cost							
Sub-total of Other Cost								
Total of Investment								

Appendix Table 3: Cooperative Input & Output Analysis

**** Cooperative Input & Output**

No.	Project	Quantity	Unit Price	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
I、	Productive Inputs												
1、	Seed												
2、	Fertilizer												
3、	Pesticide												
4、	Land Rental Fee												
II、	Labor Cost												
1、	Salary												
III、	Fixed Assets Input												
1、	Office Room												
2、	Machinery Equipment												
3、	Depreciation												
	⋮												
IV、	Management Cost												
1、	Office Cost												
2、	Financial Cost												

	⋮												
V、	Other Cost												
VI、	Tax Fee												
1、													
2、													
VII、	Sales Revenue												
1、	Product 1												
2、	Product 2												
VIII、	Gross Profit												
IX、	Reserve												
X	Distributive Profit												

183. Attachment 3: Guiding Principles for Company-Cooperative/Household (CC/H) models under the project.

The project would develop guidelines for CC/H support models, which would cover the following principles:

- Suitable companies should have proven business experience and technical, financial and management capacity (clear criteria would be defined);
- Company can prove that it has a sufficiently large and secure market for the product;
- A clear identification and socio-economic profile of the beneficiary households (location, number, poverty, ethnic minority, gender and age of main participant/beneficiary, farm size, etc.);
- A joint investment proposal and financing plan to be prepared based on a documented consultation process with the involved cooperatives/households and written samples of sustainable and fair purchasing arrangements;
- A financing plan showing the enterprise investment if applicable, and the cooperative farmer technical assistance and investment needs;
- Project funds would be provided based on a tri-partied financing agreement (enterprise/coop/PMO);
- Project funds can only be used to finance the cooperative or household investments including joint infrastructure and training and capacity building (no enterprise assets);
- Cost sharing should be applied (e.g. project funds 50% for productive assets, 100% for training and capacity building);
- Project funds would not be channelled through the enterprise but provided directly to coop/farmers;
- a set of quantified targets (e.g. number of smallholder farmers/poverty households engaged, volume of products to be procured, minimum prices to be paid, etc.) with a written commitment by the enterprise to achieve these targets as part of the tri-partied financing agreement;
- arrangements and an agreement for a third-party monitoring.

Chapter 4: Project Implementation Structure, Planning and Innovations

4.1 Project management and coordination

184. **Lead implementing Agency:** The Provincial Department of Agriculture and Rural Affairs (DARA) has been appointed as lead implementing agency. Specifically, the Hunan Agricultural Foreign Economic Cooperation Center within DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). Additional support will be mobilized from the Office of Rural Revitalization, Divisions of Cooperative Economy and other divisions of DARA whenever needed. The PPMO will not be using IFAD loan to carry out its functions: it will mobilize adequate budgetary resources from the government budget to carry out its overall management responsibilities.
185. **Prefecture and County Project Management Offices:** Major implementation responsibilities of the project lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs, and adequately staffed - including through the acquisition of capacity and services from the market. Relevant technical bureaus in the counties (such as water conservancy, meteorological, transportation bureaus, etc.) will be mobilized to support the project implementation in the related activities of the project as per need. The Women Federation (WF) and Youth League (YL) in the counties will be also be assigned responsibilities in undertaking women and youth related activities designed for the project. The Chairperson of county Women Federation will be assigned the role of deputy project director at the county CPMO, with a specific role in overseeing the gender related aspects and activities of the project, and facilitating gender transformation in the project context. Prefecture PMOs at Xiangxi and Shaoyang will be established to provide oversight to project implementation in their respective counties. Similarly as the PPMO, the Prefecture PMO will secure required resources from the government to discharge its supervisory duties.
186. **Department/Bureaus of Finance:** The Department/Bureau of Finance at Provincial/County level and at Xiangxi Prefecture and Shaoyang City will be responsible for administering programme resources, including the IFAD loan and counterpart funds.
187. **Implementing Support Units:** Implementing Support Units will be established in the project townships to facilitate project implementation, targeting and related monitoring activities.
188. **Village Implementation Groups:** (VIGs) will be established in the project supported villages to mobilize participation of farmers in the project such as in the consultative process of developing business partnership with agro-entities; oversee public rural infrastructure construction and maintenance; promote project prioritization to women and youth, etc.
189. **Provincial Coordination Committee:** A coordinating committee comprising at least the Provincial Department of Finance (DOF), the Provincial Department of Agriculture and Rural Affairs (DARA), the Provincial Development and Reform Commission (PDRC), and the

Provincial Office of Poverty Alleviation is foreseen to provide overall guidance and coordination of the project implementation. The Committee can be mobilized as per need.

190. **Project Leading Group:** At county level, a Project Leading Group will be established to be chaired by the executive county governor, comprising at least the County Bureaux of Finance (BOF), Agriculture and Rural Affairs (CARA), and Poverty Alleviation Office, Women Federation etc. The Project Leading Group will provide overall guidance and coordination of the project implementation.
191. **Monitoring and Information System:** A management information system (MIS) which will be specifically developed for the project, and that will integrate information regarding project management, financial management and physical progress, allowing real-time monitoring, evaluation and reporting, will be established to support the core project management functions at the provincial and county levels.
192. **Partnership with Women Federation and Youth Leagues:** The Women Federation (WF) and Youth League (YL) in the counties will be also be assigned responsibilities in undertaking women and youth related activities designed for the project. The Chairperson of county Women Federation will be assigned the role of deputy project director at the county CPMO, with a specific role in overseeing the gender related aspects and activities of the project, and facilitating gender transformation in the project context.
193. **Partnerships with UNWomen and China Youcheng China Social Entrepreneur Foundation to promote women empowerment and youth development:** Partnerships will be sought with other agencies and service providers to promote women empowerment and rural youth development in the project area. UNWomen and China Youcheng China Social Entrepreneur Foundation have indicated their interest to collaborate with the project to jointly pursue these objectives.
194. **Partnership with the Agricultural Information Institute of the Chinese Academy of Agricultural Science:** IFAD and the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) are entering into an agreement by which CAAS will provide support to IFAD in monitoring and evaluating the IFAD portfolio in China, extracting relevant knowledge from IFAD portfolio, and utilizing it to inform policy making. Within this context, the project would also enter into an agreement with AII-CAAS for carrying out major functions related to M&E, knowledge management and policy dialogue, i.e. carrying out baseline, midline, and endline surveys, analysis of data, impact evaluations, policy notes, particularly [policy engagement on Gender Equality and Women Empowerment](#).
195. **Business Service Centers:** The Business Service Centers that will be established by the project could eventually be assigned with certain functions and duties in supporting business plan development and implementation support, training and other capacity building activities and services (This would however need to be decided on case by case basis in the counties, subject to the capacity and performance of these centers).

- 196. Independent third-party Verification Agency for DLIs:** Since sub-component A.3 professional farmer training program will be developed on concept of Program RBL, three additional DLIs outcome indicators (i.e DLI-1, incremental number of farmers completing the new professional farmer development training program; DLI-2, Incremental number of women completing the new professional farmer development training program; and DLI-3, Reduced age of the trainees completing the new professional farmer development training program) will be developed in line with the result-based lending approach that will be piloted under this project. These DLIs be used to trigger the disbursement of funds for sub-component A.3.
197. Thus, an independent third-party verification agency will be contracted by the project to verify that the disbursement-linked indicator target set for the activity that would pilot the program result based lending approach (A.3- Improving professional farmer training program). Confirmation that the disbursement-linked indicators (DLI) target has been achieved would be through a letter of confirmation to IFAD.
198. **Role of MARA:** In order to facilitate the possible scaling up of successful innovations promoted through the project beyond Hunan province, and inform national policies, DARA is invited to strengthen the linkages with the Ministry of Agriculture and Rural Affairs (MARA). A budget for policy activities under Component C has been included to favour and provide sufficient resources to implement activities aimed - among alia - to this purpose.
199. **Procurement:** Procurement of goods, works and services financed by the project will be carried out in accordance with the Procurement Law of the People's Republic of China (2002) and its amendments to the extent that they are consistent with the provisions of IFAD's Project Procurement Guidelines and Handbook (2010) and its amendments. The procurement methods to be applied, prior review arrangements, and the thresholds for different procurement methods will depend on the expenditure and the estimated value of the contract, and will be detailed in the letter to the borrower.

A thorough assessment of FM capabilities/system and full fiduciary assessment of the proposed implementing agencies will be carried out and the risk and necessary mitigating measures to be identified in the e Project Design mission.

H2RDP will pilot a result-based Lending/disbursement (RBL) in selected sub-components. Replication at larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation. The disbursement under RBL will be conditional to the achievement of agreed and independently verifiable targets or milestones. Detailed disbursement linked indicators need to be identified and verified by an assigned independent agency following agreed verification protocols.

LPA is Department of Agriculture and Rural Affairs(DARA). DARA is under the administrative jurisdiction of the Ministry of Agriculture and Rural Affairs.

PMOs established at DARA at 3 levels (Provincial, prefecture and county). They will be responsible for financial management within their role of overall project management and coordination among different IAs . The PMO will have the primary responsibility for the oversight of the project's financial resources, DA management, disbursement and fund flow

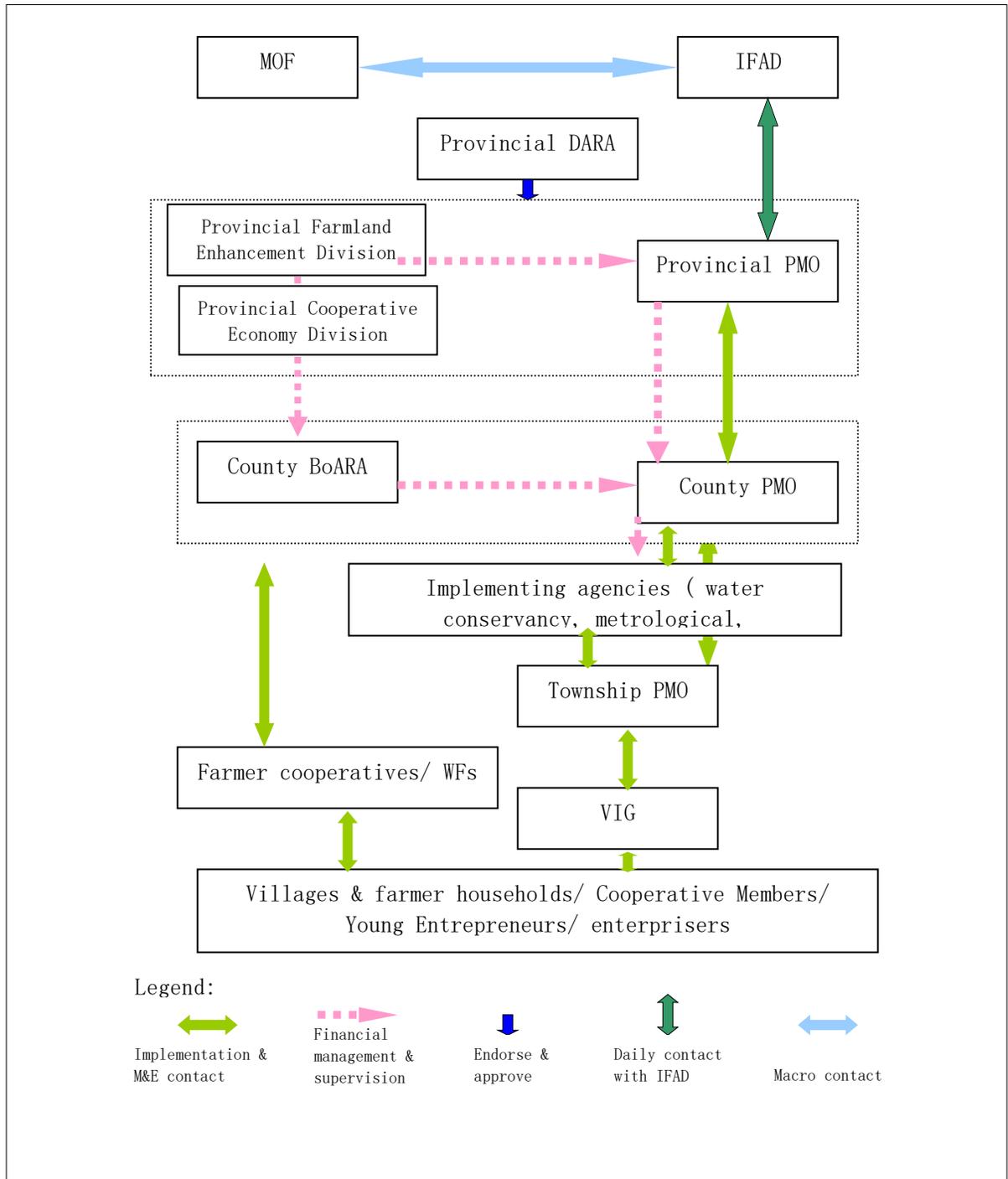
management. oversees overall project implementation, and provides leadership management support and coordination.

Day to day implementation of the project is also the responsibility of the Project Management offices (PMO and CPMOs) which shall be established at the county (CPMO) and province (PPMO) within the corresponding offices of the Agriculture and Rural Affairs. PMOs are comprised of the Agriculture and Rural Affairs staff who are experienced in project management, procurement and financial management.

To speed up the project start-up: (i) adequate and capable finance staff should be appointed at each level of PMOs with more relevant educational background and working experience to quickly adapt to the sound FM requirements, arrangements and accounting practices; (ii) PIM should be properly prepared, translated and distributed to all level of PMOs; (iii) Retro-active financing might be used to speed up the project implementation (iv) training on capacity building for staff at implementing agencies should be conducted at early phase to enhance their understandings and capability and possibly improve staff turnover rate.

Web-based accounting software should be identified and procured in the design stage. Strong management and effective coordination systems will be essential to ensure efficient financial reporting and fund-flows, which will be key to improve slow disbursement and successful project implementation; The MIS system to be serve as project management tool should be adopted more widely with the development of key areas of the system including Financial management to be linked with procurement management, etc..

Project Organizational Structure



4.2 Project Planning and Innovations

200. Planning will follow current practices for the IFAD-funded projects in China: planning will be done on annual basis through the development of annual work plan and budgets (AWPBs). AWPBs will be developed through participatory approach. AWPBs would include, among other things, a detailed description of the planned activities and required budget, a procurement plan, and a plan for the implementation of the activities. AWPBs would need to receive IFAD's "no objection".
201. The AWPB is an essential covenant in the legal Financing Agreement. The failure to prepare it on a timely, annual basis, may lead to delay or suspension of loan and grant disbursements on the part of IFAD. AWPB serves both as a tool for guiding project implementation and as a collection of benchmarks against which actual implementation progress can be measured throughout the year. A poorly thought-through and prepared AWPB may cause a loss of purpose and direction in implementation, give rise to the need for resource-consuming ad-hoc problem solving when unforeseen (but foreseeable) obstacles to implementation surface during the year, and make it difficult to ascertain if implementation progress is on track.
202. The AWPB is the outcome of the annual project planning process. Through annual work planning, the project decides what activities will be carried out over the next 12 months, by whom, the resources and the time needed to complete them. The AWPB is therefore a planning and management tool that specifies what is expected to be done during the year, how and at what cost. The AWPB should be results-oriented and with clear descriptions of the results that the project is expected to achieve in the AWPB period. The draft AWPB will be sent to IFAD for review and no-objection 60 days prior to start of each year of implementation.
203. The PPMO will prepare the Annual Workplan and Budget Report using the following table of contents:
- A. Introduction
 - Project Outline
 - The Annual Planning Process and AWPB
 - B. Implementation Progress and Performance
 - C. Project Strategy and Focus for the Coming Year
 - Key Constraints and Required Actions
 - Overall Strategic Focus
 - Components
 - D. Consolidated Annual Budget
- Annexes:**
- Annex 1. The Logical Framework
 - Annex 2. Procurement Plan
 - Annex 3. Staff Development Plan
 - Annex 4. Detailed Work Plans and Budgets
204. **Monitoring and evaluation (M&E):** Monitoring and evaluation is an essential function that would support project management. M&E will be supported by a management information

system (MIS) which will be specifically developed for the project, and that will integrate information regarding project management, financial management and physical progress, allowing real-time reporting. see for details in chapter 5

205. **Learning and knowledge management (KM):** The project knowledge management strategy would be built on the following key elements: (i) an effective M&E framework will be established to monitor implementation progress, and would provide the evidence for learning; (ii) a baseline, mid-line, and endline survey will be conducted at the beginning, mid-term, and completion of the project; (iii) workshops at different levels will be held regularly to share knowledge, experiences, innovations, and best practices; (iv) study tours, exposure and exchange visits, both in the country and outside the country will be encouraged as a vehicle for sharing knowledge; (v) an agreement with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) will be signed for the provision of support in M&E, and knowledge management.
206. Similarly partnerships with UNWomen and China Yenching University Social Entrepreneur Foundation to promote women empowerment and rural youth development will open new platforms of learning and knowledge management.
See details in Chapter 6
207. **Innovations:** One of the main objectives of the project is to introduce, test, pilot, and demonstrate innovative models, approaches, mechanisms that, that - if successful - could be replicated and scaled-up, and inform policy-making. - or shared with other developing countries through south-south cooperation [9]. Anticipated innovations include:
- i. ***Inclusive rural business development models:*** The project would provide investment support for rural businesses (new and existing), which demonstrate viable and inclusive business models featured by genuine vulnerable households' participation and fair benefit sharing arrangements. Professional farmer cooperatives would be the primary focus, but other new economic entities will also be targeted by the project.
 - ii. ***Business incubation centers:*** The project will support the setting-up and operationalization of business incubation centers, platforms to support entrepreneurship programs and business start-up (Ref. Sub-component A.2).
 - iii. ***Climate proofed design of infrastructure:*** The project will support the improvement of the capacity to assess climate-risks, and plan and make investment decisions accordingly, and the integration of climate considerations into the design and technical specification of the infrastructures, to reduce their vulnerability to the anticipated impacts of climate change (Ref. Component B).
 - iv. ***Disbursement against results:*** Under the Program RBL, the project will introduce on a pilot basis an innovative mechanism for disbursement, i.e. disbursing project funds allocated for a sub-set of activities (Ref. Sub-component A.3) against the achievement of agreed and independently verifiable targets or milestones i.e DLIs that are considered important towards contributing to the achievement of the project objectives. The achievements of the agreed targets or milestones, or disbursement linked indicators

(DLIs), will be verified by an assigned independent agency following agreed verification protocols. The disbursement against results will be piloted on a small scale by the project, and replication at a larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation.

Chapter 5: Project Monitoring and Evaluation (M&E)

208. Monitoring and Evaluation (M&E) system for H2RDP will be developed as a tool for effective project implementation management. PPMO will lead the process with the assistance of IFAD within the first year of the project. The M&E system will enable IFAD, the Government and the stakeholders to monitor Project's internal performance. The objective of the tool is to collect reliable data and information for measuring performance and progress towards achievement of results; and to provide information about success and failures, so that corrective measures can be taken for successful implementation of project activities. It will be also used as a learning tool to provide information for critical reflection on project strategies and operations and supporting decision-making at various levels as a basis for results-based management.

Approaches

209. **The project log-frame:** A project log-frame has been set-up based on the project activities that are expected to generate outputs, outcomes and impact towards achieving the development objective. A series of Core Indicators and project indicators have been included in the project log-frame and disaggregated by gender, age, and ethnic group when relevant. These indicators form the basis of project M&E and will be subject to adjustment during implementation of the project, as required.
210. As part of its commitment to being gender transformative, a pro-WEAI survey will be undertaken at baseline and completion. The pro-WEAI survey will assess the increase in the participating women's agency and empowerment. Aspects of pro-WEAI will also be included in the Core Indicator Outcome Indicator Survey, particularly with regard to asset management and productivity.

The IFAD Empowerment indicator (simplified pro-WEAI) surveys budgets are included for baseline, mid-term and completion and the amount US \$ 85000 is allocated towards all baseline surveys.

211. **Program-RBL DLIs:** Since sub-component A.3 professional farmer training program will be developed on concept of Program RBL, three additional DLIs outcome indicators (i.e DLI-1, incremental number of farmers completing the new professional farmer development training program; DLI-2, Incremental number of women completing the new professional farmer development training program; and DLI-3, Reduced age of the trainees completing the new professional farmer development training program) will be developed in line with the result-based lending approach that will be piloted under this project. These DLIs be used to trigger the disbursement of funds for sub-component A.3.
212. **Independent third-party Verification Agency for DLIs** Thus, an independent third-party verification agency will be contracted by the project to verify that the disbursement-linked indicator target set for the activity that would pilot the program result based lending approach

(A.3- Improving professional farmer training program). Confirmation that the disbursement-linked indicators (DLI) target has been achieved would be through a letter of confirmation to IFAD

213. **Verification protocol:** The achievement of the DLI_1, DLI_2 and DLI_3 as defined above will be recorded semi-annually by the Hunan Provincial Project Management Office (PPMO) based on reports by the project county PMOs. The PPMO will report the data to a third-party Verification Agency (VA) for verification. The verification review will be done against Program Guidelines approved by Hunan [*specific document yet to be identified*]. Verification that a DLI target has been achieved would be through a *letter of confirmation to the IFAD*.
214. **The progress-based approach.** A regular progress-based approach will also be adopted, involving regular recording of, and accounting for progress against AWPB targets; and routine, periodic assessments of movement towards beneficiary impact. PPMO will be responsible for all M&E activities, based on the IFAD M&E Guidelines to orient the selection of indicators, baseline data, methods for data collection, and synthesis. Service providers, contractors, and beneficiary groups will be the prime sources of data emanating from grass roots activities. This will be prepared in a participatory manner as part of the start-up activities in line with the logical framework.

Impact assessment: Managing for impact means to respond to changing circumstances and increased understanding by adapting the project so that it will be more likely to achieve its intended impacts. This is only possible if there is reliable information about the progress of activities and their outcomes, the reasons for success and failure, and the context in which activities are taking place. This information is the output of the M&E procedures. Analyzing this

Managing for Impact Matrix		
Elements	Project that manages for impact	Project that does not manage for impact
A focus on rural revitalization	The implementing partners, including primary stakeholders, collect data on impact and meet regularly to consider if impacts can be seen and whether they meet expectations	The project leaves impact assessment to outside organizations and only focuses on monitoring the implementation of activities
A learning environment	Project and partner staff and primary stakeholders regularly and openly discuss progress and problems. Problems and mistakes are the basis for learning how to work better. People feel safe enough to share their ideas and observations with higher authorities and peers.	Staff focus only on implementing activities, without asking if they are relevant to local poverty needs. Project/Partner organization staff feel that their ideas and observations are not valued and do not speak up when they see things going wrong. Primary stakeholders are rarely asked their opinions.
Effective operations	Clear systems exist for tracking staff performance, equipment use, etc. People are clear about their responsibilities and deadlines, and the resources they need to do their work are available. The managers allocate sufficient budget and are building capacity where needed.	People are often unclear about what they should be doing, when and where. Vehicles and other resources are poorly coordinated and often not available on time. Much time is wasted inactivity. No efforts are made to fill capacity gaps.
A supportive M&E system	The project manager has quick and easy access to information about progress. Staff and partners generate information about outcomes and impact achievements. Information about progress is shared regularly with	Few people know what the project has achieved to date. There is little evidence about whether all the activities of the project are leading anywhere. M&E is seen largely as an external reporting function.

information with key stakeholders can support good decisions that improve the project

	all stakeholders in a visually appropriate way. The walls of the project office show up-to-date information, graphs, pictures etc. about project progress. Studies are undertaken to explain any emerging problems. Project reports make interesting reading and tell both the good and bad and how improvements will be made.	Project reports are uninteresting, are not analytical, and exaggerated success while not mentioning problems. Little information is shared with project stakeholders.
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Key processes

215. **Setting up the M&E system.** H2RDP will establish an effective M&E system from PPMO through county PMOs down to the VIGs. The M&E system is the set of planning, information gathering and synthesis, reflection and reporting processes, along with the necessary supporting conditions and capacities required for the outputs of M&E to make a valuable contribution to decision-making and learning. The system will operate in line with IFAD’s M&E guideline and building as much as possible on provincial existing M&E systems, statistics and databases.
216. **Key M&E activities.** The purpose of monitoring the activities and the different components of the project is to enable the management to track the progress or any obstacles facing the project and modify the plan if required. This requires designing a plan for monitoring and evaluation including the actual activities that are implemented and their indicators. The following table summarizes the expected M&E activities during the different stages in H2RDP project life cycle.

Phase	M&E Activities
Early design phase (formulation and appraisal)	<ul style="list-style-type: none"> • Establish the scope and purpose of the M&E system. • Indicate key performance questions and indicators, plus associated monitoring mechanisms. • Identify organizational arrangements for M&E. • Develop terms of reference for M&E staff. • Indicate the process for how M&E is to be established during start-up. • Establish an indicative M&E budget. • Document the above in the M&E framework.
Start-up prior to loan effectiveness (with the Special Operating Fund)	<ul style="list-style-type: none"> • Revise performance questions, indicators and monitoring mechanisms after reviewing the project strategy. • Organize training with staff and partners likely to be involved in M&E. • Initiate baseline studies, as appropriate.
Start-up after loan	<ul style="list-style-type: none"> • Review project design in relation to M&E with key stakeholders.

effectiveness	<ul style="list-style-type: none"> • Develop a detailed M&E plan, taking into consideration existing mechanisms with partners. • Put in place necessary conditions and capacities for M&E to be implemented.
Main implementation	<ul style="list-style-type: none"> • Ensure information needs for management are met. • Coordinate information gathering and management. • Facilitate informal information gathering and communication. • Support regular review meetings and processes with all implementers. • Prepare for supervision missions. • Prepare for and facilitate the annual project review. • Conduct focused studies on emerging questions. • Communicate results to stakeholders. • Prepare annual progress reports.
Mid-term review (MTR)	<ul style="list-style-type: none"> • Collate information for the mid-term review. • Facilitate the internal review process to prepare for the external review process. • Help respond to MTR feedback. • Adjust the M&E system, as necessary.
Three-wave survey	<ul style="list-style-type: none"> • Take place in three stages: a) a baseline survey in early 2021, b) a midline survey in 2023, c) an endline survey in 2025, in compliance with the newly applied IFAD Core Outcome Indicators (COI) Measurement Guidelines (May/2020) • Develop a detailed sampling and design methodology of the survey • Tailor the questionnaires to project objectives • Select and train enumerators • Collect and analyze the detailed data from survey • Prepare three-wave survey reports, presenting the analysis of the results for all outcome indicators (core and project-specific)
Phasing-out and completion	<ul style="list-style-type: none"> • Assess what the implementers can do to sustain impact and sustain M&E after closing down - and implement these ideas. • Hold workshops and do field studies with key stakeholders to assess impacts. • Identify lessons learned for the next phase and/or other projects.

H2RDP M&E System Structure

i. Monitoring

217. **Implementation monitoring** will focus on the project outputs, the physical and financial progress of activities. Population and household-based monitoring indicators need to be disaggregated by sex, age, ethnic minorities, and activity area or agricultural sector, where applicable. For this purpose, monitoring data should be collected at the grassroots level (VIG), depending on the nature of indicators. In general, the state of benefits and participation at the levels of households and individual beneficiaries will be undertaken through the grassroots recording and reporting by VIGs and producer cooperatives.

218. **Rural business entity capacity development and related improved performance** will be recorded and reported by implementing partners, and through an annual survey of all programme-supported agribusiness entities. The CPMOs will organise the collection of data in accordance with the agreed indicators and report annually through the provincial PMO to IFAD. For this purpose, an operational data collection system of monitoring indicators will be established from the grassroots level (VIG and cooperatives) up to the PPMO. Frequency of reporting and responsibility is further defined in the appropriate log-frame columns.
219. **Annual Project Progress Report.** On an annual basis, CPMO will submit annually progress report to PPMO. The reports will record the financial and physical activities against Annual Work Plan & Budget (AWPB) targets. The PPMO will prepare the reporting formats and contents to be submitted and be responsible for the compilation of annual reports. The annual report should address (i) quantitative and qualitative progress made in implementing the Project and achieving its objectives, (ii) problems encountered during the reporting period, (iii) steps taken or proposed to be taken to remedy these problems, and (iv) the proposed programme of activities and the progress expected during the following reporting period. Sufficient information must be made available about what money is spent on, how much is spent on what, and what the results are. The annual progress report will be submitted to IFAD no later than the end of February of the following year.

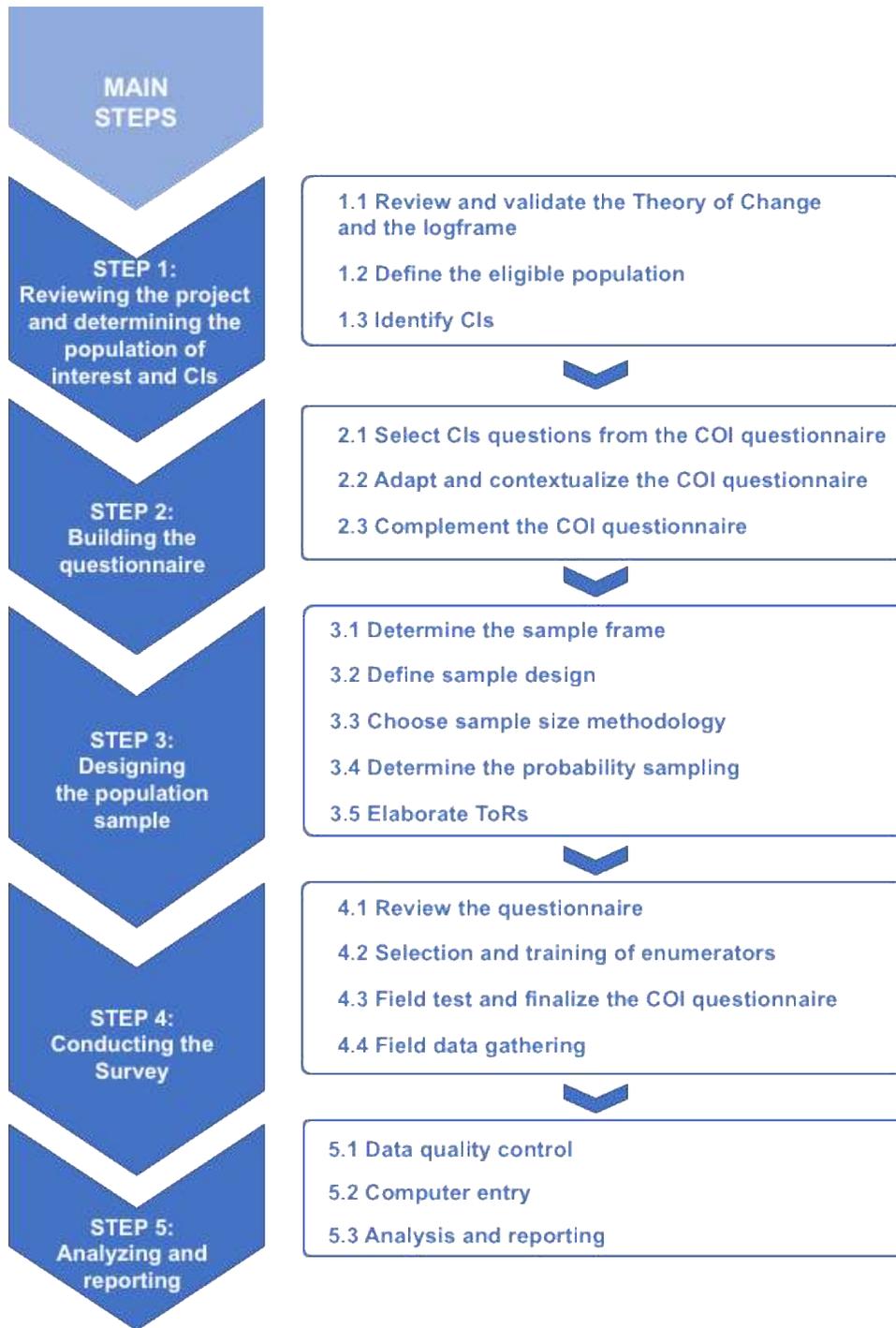
ii. Evaluation

220. Evaluation is an instrument for assessing changes caused by interventions or timing. It will focus on the outcomes and impact of the project. Outcome and impact indicators for H2RDP are set up based on the criteria of measurability, pertinence and sensitivity to change, while following the principles of: (i) building on existing indicators; (ii) including CIs relevant to the project theory of change (iii) relating to project components; and (iv) addressing the project strategic needs.
221. Outcome evaluation will be conducted annually and impact evaluation will be conducted three times during the project implementation, including the baseline survey before implementation, and mid-term survey prior to Mid-Term Review and endline survey at project completion.
222. **The three-wave surveys** will be conducted in compliance with the newly applied **IFAD COI Measurement Guidelines**, which provide a step-by-step explanation on how to plan for, design, conduct and analyse Core Indicators (CIs) outcome surveys over the project cycle. To avoid having separate surveys for the Core Indicators and for the other project-specific indicators, the guidelines are meant to guide the collection of data on all outcome indicators (core and project-specific) at baseline, mid-line and end-line.
223. Service Providers and Technical Specialists will be engaged by the PMOs to support the implementation especially in areas where existing capacity may be inadequate, for this purpose appropriate budget has been envisaged in the project costing. Among others, the Agricultural

Information Institute (AII) of Chinese Academy of Agricultural Sciences (CAAS) may be engaged for designing project surveys and *analysing* data from the surveys.

224. Chart 1 presents main steps to develop and conduct a project-specific COI survey.

Chart 1: Main steps to develop and conduct a project-specific COI survey



225. The surveys will be conducted by adopting the following approaches:
- **Sample-based survey.** A representative sample of the desired population²⁴ should be defined prior to conducting the survey.
 - **Quantitative survey.** Collect data through quantitative surveys in order to measure and quantify the effects of project’s interventions.
 - **Comparison group**²⁵. Sample-based surveys are intended to collect data on two differentiated groups over time: the treatment group (sample of beneficiaries) and the comparison group (sample of non-beneficiaries). Attribution can only be determined through surveys contemplating the existence of a treatment and a comparison group reflecting the situation with and without project’s intervention. Note that the comparison group is mandatory only at the project completion stage²⁶.
226. **The annual outcome survey (AOS)** is a simple household survey that will be undertaken annually by project staff and will cover a small sample of at least 300 households selected randomly. The survey will be conducted exclusively in villages targeted by the project or receiving project interventions, and will include both project beneficiaries and non beneficiaries (the latter used as control group). Overall, the exercise is expected to take no more than 3 months and can be implemented by project staff and extension officers, with or without external support. The main objectives of the survey are to: (i) measure changes happening at the household level in terms of livelihoods and food security during the project life; (ii) assess targeting efficiency; (iii) provide evidence of project success or failure; and (iv) provide timely performance information necessary to undertake corrective actions.
227. The AOS will provide information on “why” and “how” some outcomes were or were not achieved. The project will use the standard AOS questionnaire as the main frame for conducting the survey and will modify it accordingly as per the project thematic areas of intervention. The AOS will be implemented starting from the end of PY2.

iii. Operational Results Management System (ORMS)

228. The ORMS is a full-fledged online system that builds on interconnected templates for the online presentation, analysis, reporting, and approval of project design, supervision and completion documents. Although, the data entered into the system for the project will be done at IFAD level, yet the project will have to provide this data on an annual basis. thus ensuring

²⁴ The desired population is a generic term representing the population from which the sample is drawn. For instance the desired population corresponds to the group of beneficiaries at baseline (when beneficiaries are identified).

²⁵ **The Comparison group** is the name given to the group of individuals not receiving the treatment or intervention in a quasi-experimental design, while the **control group** is the name of the group not receiving the treatment in an experimental design such as Random Control Trial. The COI measurement guidelines propose using a quasi-experimental design.

²⁶ Comparison groups are not mandatory at baseline and mid-term stages. Surveys including comparison groups at baseline and mid-term may be conducted if resources are available since they provide additional information for the analysis.

that the performance of IFAD operations is measured across the results chain, i.e. at the output, outcome and impact levels. The M&E unit will compile the progress of all indicators under the project log frame and send it to IFAD no later than the 31 January of the following year.

iv. Complementary M&E activity

229. In addition to the above, the project is encouraged to develop other parallel in-depth monitoring and evaluation activities. For instance, project household tracking survey (by tracking a small number of selected households to obtain relevant information for comparison before and after the project interventions), control group survey, individual case analysis (an in-depth analysis of an individual agribusiness entity, or farmer, or youth/women entrepreneur), thematic research, etc. Findings through these activities can provide a multi-perspective reference for project management, and also can capture more comprehensive project effectiveness.

v. Organizational arrangements and MIS

230. The designated M&E officers of CPMOs, under the guidance and support of the provincial M&E specialist, will arrange the collection of monitoring data in accordance with agreed indicators. They are responsible for conducting an initial quality review on data collected before reporting to the PPMO, after consolidation at county level. VIG members will assist in collecting the household-level M&E data where required, disaggregated by gender, age, poverty registration status, and by activities. Implementing partners will be involved in the collection of M&E data concerning institutions and staff training. The PPMO will review and consolidate M&E data reported by CPMOs and report semi-annually and annually to IFAD. The PPMO is also encouraged to develop complementary data collection and quality assurance tools and methods as needed.
231. A systematic Management Information System (MIS) will be developed to integrate information regarding project management, financial management and physical progress, allowing real-time reporting. All project related data will be recorded in the MIS, starting from the village and county level upwards, so that no parallel data systems have to be maintained and reconciled (in Excel or other offline mechanisms). Data in the MIS will be accessible at all levels of the H2RDP programme, which means that PPMO and CPMO staff can log into the system and see data that is relevant to their county.
232. **Baseline survey.** The baseline survey will provide information that will fit into the M&E system; basically baseline data for the programme M&E indicators. The survey will cover both beneficiary villages as well as control villages with a representative sample size. Data from the baseline for the M&E indicators will be updated on survey basis to track the different project indicators over time, including for the MTR. Under the M&E system the data will be analysed

to ensure that H2RDP activities are on the right directions and assess whether or not the targets for the indicators will be achieved.

233. The goal of the baseline study is to understand the level of poverty, agricultural activities, community development, gender inequality of the population, with special focus on women and youth within the seven targeted counties.
234. The survey should: (i) focus on key indicators required to measure the outcomes and impact of the planned activities as it was mentioned in the Project's Logical Framework; (ii) not duplicate existing available data; (iii) not require an excessive amount of interviewees time; (iv) generate accurate and reliable results based on sound statistical best practice, and; (v) allow disaggregation by gender, age, and targeting categories.
235. **Endline Survey/Project completion survey.** Programme completion survey (impact evaluation) can be conducted with the endline survey which will use the same questionnaires used for the baseline to allow for comparison against baseline results. Analysis will be done by beneficiary status, region and gender of household head.
236. The impact evaluation will assess the project impact using the same indicators (ORMS and project specific derived from the Log frame) as the baseline survey. The key elements of the Survey will include both socio-economic characteristics of the Project primary target group and status of social and economic infrastructure. The Survey will be aimed to measure the changes brought about by the Project in the socio-economic development of its beneficiaries. It is anticipated that the Survey will combine a formal household sample survey with a more qualitative and in-depth study. The Survey will also compare the socio-economic situation of beneficiaries and non-beneficiaries in order to better attribute the impact to the project. Detailed analysis will be undertaken of the changes observed between baseline survey and the impact survey. Where possible, panel data will be used i.e. some of the beneficiaries interviewed during the baseline survey will also be included in the sample of the impact survey.

Supervision, Mid-term Review and Completion plans

237. The project will be under the direct supervision of IFAD. In order to facilitate the project's implementation and ensure the achievement of project objectives, IFAD and the Government will perform project supervisions/reviews that include (at least one) annual supervision, mid-term review, and completion review. Additional, specific implementation support missions to deal with specific implementation issues can be organized as per need.
1. **Annual supervision:** Annual supervision will be conducted by supervision missions sent by IFAD, and to the extent possible jointly with the Government. The missions will review the progress of program implementation, both physically and financially; implementation performance; fiduciary aspects, results, impact and sustainability. Recommendations to issues raised, if any, will be made by the mission to improve the program implementation. For the first supervision of the program, the focuses will be on reviewing adherence to the programme strategies and institutional performance, including implementation

arrangements, targeting, appropriateness of procurement, functioning of the M&E system, and effectiveness of financial management.

2. **Mid-term review:** IFAD and the Government will jointly carry out a “mid-term review” (MTR). Among other things, the MTR mission will review the project approaches and strategies including the effectiveness of targeting and gender mainstreaming strategies, implementation modalities, poverty and gender focuses, impact of individual intervention, and sustainability. The mission will recommend a scaling-up or reorientation as may be required to achieve project objectives and remove eventual constraints. Recommendations from the MTR may result in modifications to the Loan Documents.
3. **Completion review:** Completion review, also jointly conducted by IFAD and the Government, will evaluate, among other things, the results and impact of the program, review sustainability and exit arrangement, and draw experiences and lessons for later IFAD and government supported projects.

238. Progress Reporting

The progress reports are to be prepared annually and, at a minimum, should address (i) quantitative and qualitative progress made in implementing the Project and achieving its objectives, (ii) problems encountered during the reporting period, (iii) steps taken or proposed to be taken to remedy these problems, and (iv) the proposed programme of activities and the progress expected during the following reporting period. Sufficient information must be made available about what money is spent on, how much is spent on what, and what the results are.

239. The main functions of progress reports are:

1. Review current progress compared to planned activities, and expenditure compared to budget;
2. Provide overall status information on the project since it started, in terms of physical progress and total expenditure;
3. Identify problems during the reporting period and steps to solve these problems;
4. Analyse strengths and weaknesses, opportunities and threats;
5. Discuss quantitative and qualitative progress made in achieving overall objectives; and
6. Provide strategic direction for the next planning cycle.

Preparation of Progress Reports

240. Each County Program Management Office (CPMO) will submit annually progress report to PPMO. The reports will record the financial and physical activities against Annual Work Plan

& Budget (AWPB) targets. The PPMO will prepare the reporting formats and contents to be submitted and be responsible for the compilation of annual reports. The reports will be submitted to IFAD with the format and content described in the following section, no later than two months after the end of each reporting period. The Project Progress Report will have the following format and content.

241. Format of Progress Reports

1. **Section A – Introduction:** A brief summary of the Project Objectives and the design features as is given in the Project Design Report will be presented in this section. It will be written once and used for all future Progress Reports, with minor changes as may be necessary.
2. **Section B - Executive Summary:** A brief summary of the content of the report will be presented in this section, highlighting performance during the project period and to date; trends; explanations for large variations from the initially set Project Design Report targets and objectives; problems and issues, if any; and proposed action during the next reporting period and beyond.
3. **Section C - Detailed Report:** This section will include the following: (a) Descriptions of the Progress made during the reporting period and to date (by components, sub-components and activities); (b) Sources and Uses of Funds Statement; (c) Statement of Use of Funds by Expenditure Type and by Components; (d) Reconciliation of the IFAD funded Special Accounts; (e) Output Monitoring Report; (f) Procurement Report; and (g) Other Relevant Reports. The information contained in the above statements and tables will provide the linkages between physical and financial progress.
 1. **Progress Made by the Project:** This part will be a summary of the most important aspects of project implementation to date including any special issues that have surfaced and with suggestions for resolution. It will concisely describe and highlight: progress of all key project components including physical works, implementation and project output, actual costs incurred vs. estimates, financing received from IFAD and government of China, as well as major expenditures, large procurements carried out and disbursement performance, critical studies undertaken, technical assistance and training received. It will assess performance in reaching and benefiting the intended target groups, in particular the poorer, as well as gender and ethical equity and youth in participation and benefits. It will include numerical information on activities, numbers of participants (male and female) and information about the socio-economic status of individual participants.
 2. **Sources and Uses of Funds Statement for the Reporting Period and Year-to-Date.** This will indicate the opening cash and bank balances, listing of the sources and amounts of funds received and expenditures by project component and in line with the IFAD loan/ grant withdrawal schedule in the respective agreements, and the cash and bank balances. It also shows cumulative figures to date side by side.

3. **Statement of Use of Funds by Expenditure Type** - These tables list expenditures by component, by expenditure type, and by disbursement categories. An important feature of these tables will be the comparative listing of the actual expenditure figures with the estimates from the latest Annual Work Plan & Budget (AWPB) and the showing of the variances and appropriate explanation for each such variance. The total estimated base costs of the project components and expenditure categories as per the appraisal report will also be shown side by side.
4. **Output Monitoring Report** - Physical progress and expenditures in relation to such progress will be presented here. The output indicators will be taken from the physical performance targets set at appraisal. Here again, actual and targets set at appraisal will be compared and explanation provided for deviations.
5. **Procurement Report (Updated Procurement Plan)** - The Procurement Report consists of the approved Procurement Plan at grant effectiveness and duly up dated and all the key procurements made on behalf of the project and their status as at the end of the reporting period. The Procurement Report will also include all key procurement of works, vehicles, equipment, goods and consulting and other services undertaken by the project since project start up.
6. **Other Relevant Aspects** - Status on the following aspects of the project will be included in this part of the progress report:
 - (i) **Organization and Staffing:** The progress report will include the latest organization chart of the Project. The Chart will give the names, titles, and gender of all senior staff and any changes in the senior management and project compensation details will be reported.
 - (ii) **Accounts and Audit:** This part will describe the status of the books of accounts, preparation of quarterly accounts, readiness for the accounts for annual audit and progress or completion of the audit (during the appropriate quarter). Where audits have been completed, key findings, observations, qualifications, and recommendations of the auditors will be provided in this part of the progress report.
 - (iii) **Compliance with Conditionality/Legal Covenants:** Status of compliance with all stipulated conditions included as covenants in the loan agreement will be given. Problem relating to non-compliance of any legal covenant will also be highlighted

Chapter 6: Knowledge Management and Communication

242. The project knowledge management strategy would be built on the following key elements: (i) an effective M&E framework will be established to monitor implementation progress, and would provide the evidence for learning; (ii) a baseline, mid-line, and endline survey will be conducted at the beginning, mid-term, and completion of the project; (iii) workshops at different levels will be held regularly to share knowledge, experiences, innovations, and best practices; (iv) study tours, exposure and exchange visits, both in the country and outside the country will be encouraged as a vehicle for sharing knowledge; (v) an agreement with the Agricultural Information Institute, Center of International Agricultural Research of the Chinese Academy of Agricultural Science (AII-CAAS) will be signed for the provision of support in M&E, and knowledge management for IFAD portfolio in China.
243. Similarly partnerships with UNWomen and China Yenching China Social Entrepreneur Foundation to promote women empowerment and rural youth development will open new platforms of learning and knowledge management. For details please consult [attached Appendix-A](#)
244. **Innovations**²⁷ : The best instrument for KM and effective communications is the demonstration of innovative models. With the same principle one of the main objectives of the project is also to introduce, test, pilot, and demonstrate innovative models, approaches, mechanisms, that - if successful - could be replicated and scaled-up, inform policy-making - or shared with other developing countries through south-south cooperation. **Anticipated innovations include:**
1. ***Inclusive rural business development models:*** The project would provide investment support for rural businesses (new and existing), which demonstrate viable and inclusive business models featured by genuine vulnerable households' participation and fair benefit sharing arrangements. Professional farmer cooperatives would be the primary focus, but other new economic entities will also be targeted by the project.
 2. ***Business incubation centers:*** The project will support the setting-up and operationalization of business incubation centers, platforms to support entrepreneurship programs and business start-up (Ref. Sub-component A.2).
 3. ***Climate proofed design of infrastructure:*** The project will support the improvement of the capacity to assess climate-risks, and plan and make investment decisions accordingly, and the integration of climate considerations into the design and technical specification of the

²⁷ It is important to clarify that, in the context of this project, the term 'innovative' is used to describe a model, approach or mechanism that is different from the 'mainstreamed' approach. This definition reflects the Government's understanding and expectations. Some of the elements described below can be considered truly 'innovative' in the country, provincial or project area's context. Others may not be completely new in the country context, but their adoption may have been limited and their implementation may have encountered challenges that the Government is interested to understand and overcome

infrastructures, to reduce their vulnerability to the anticipated impacts of climate change (Ref. Component B).

4. **Disbursement against results:** Under the Program RBL, the project will introduce on a pilot basis an innovative mechanism for disbursement, i.e. disbursing project funds allocated for a sub-set of activities (Ref. Sub-component A.3) against the achievement of agreed and independently verifiable targets or milestones i.e DLIs that are considered important towards contributing to the achievement of the project objectives. The achievements of the agreed targets or milestones, or disbursement linked indicators (DLIs), will be verified by an assigned independent agency following agreed verification protocols. The disbursement against results will be piloted on a small scale by the project, and replication at a larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation.
245. Building on lessons from IFAD country programme, special attention will be put on making sure: (i) programme launch is effective for visibility (ii) knowledge management indicators are included in the M&E system; (iii) of setting up solid information management systems (e.g. electronic archives); (iv) clarifying roles and responsibilities in knowledge management in the programme management and implementation teams; (v) facilitating internal programme learning and cross-project exchanges; (vi) organising exchanges with other projects and agencies, organising targeted workshops, and other activities to disseminate results and attract the interest of government and development partners for improvement of their practices, replication and scaling up of tested and documented innovations.
246. In order to enhance the learning process and the dissemination of results, a knowledge management and communication strategy (KMC strategy) will be developed and integrated into the management of the programme. The strategy will include which thematic areas of learning the programme will be focusing on. The strategy will outline how the knowledge generated will be disseminated and will identify most appropriate channels.

Knowledge Management and Communication

247. The KMC strategy will be formulated based on the IFAD's knowledge management and learning framework which recognizes 5 interconnected functions which include: learning for adaptation, learning oriented monitoring and evaluation, internal and external communication, information management and innovation and experimentation.

Knowledge product

248. The knowledge products are suggested but not limited as follows: (i) a systematic Management information system (MIS); (ii) an official account on WeChat to facilitate internal and external KMC; (iii) publicity material including newsletters, radio and television programmes; (iv) studies and publications on lessons learned; and (v) Policy dialogue and Policy brief produced and submitted particularly **policy engagement on GEWE**.

249. The project follows the guidelines of IFAD's supervision and evaluation to establish a Management Information System (MIS) from the provincial project management office, the municipal project management office, the county project management office, the township project management office, and the village-level implementation team. The project will employ a third-party to build the system. Experts and consultants from AII of CAAS can be a good option to support in designing the system after successful bidding.

Integrated Knowledge Management (KM) and Learning system Model

250. Based on the model of five integrated Knowledge Management (KM) and Learning system, overall the project KM and learning is the integrated approach of identifying, capturing, evaluating, retrieving and sharing information.
- **Learning and Adaptation:** Seeking regular feedback, learning lessons to improve performance, regular reviews for collective decision making, documentation of decision that leads to change, flexibility for the use of knowledge and new innovation.
 - **Learning oriented M&E:** Setting benchmarks, indicators and learning question; collective qualitative and quantitative data, analyzing data, monitoring process, continuous follow up of progress and performance.
 - **Internal and External Communication:** Internal communication to support learning, foster teamwork and joint responsibility, culture of feedback and appreciation, creating visibility and advocacy, sharing lessons across projects and organizations
 - **Innovation and Experimentation:** Sourcing new ideas and innovations, seeking and embracing new opportunities, enriching new ideas through Communities of Practice (CoPs) groups of people who focus on particular aspects and trying out new ideas.
 - **Information management:** Electronic archives with reports and lessons, capturing and documenting information, systematizing and organizing information, packaging information to suit the targeted audience into websites and blogs as well as keeping data banks.

The Integrated Knowledge Management and Learning System

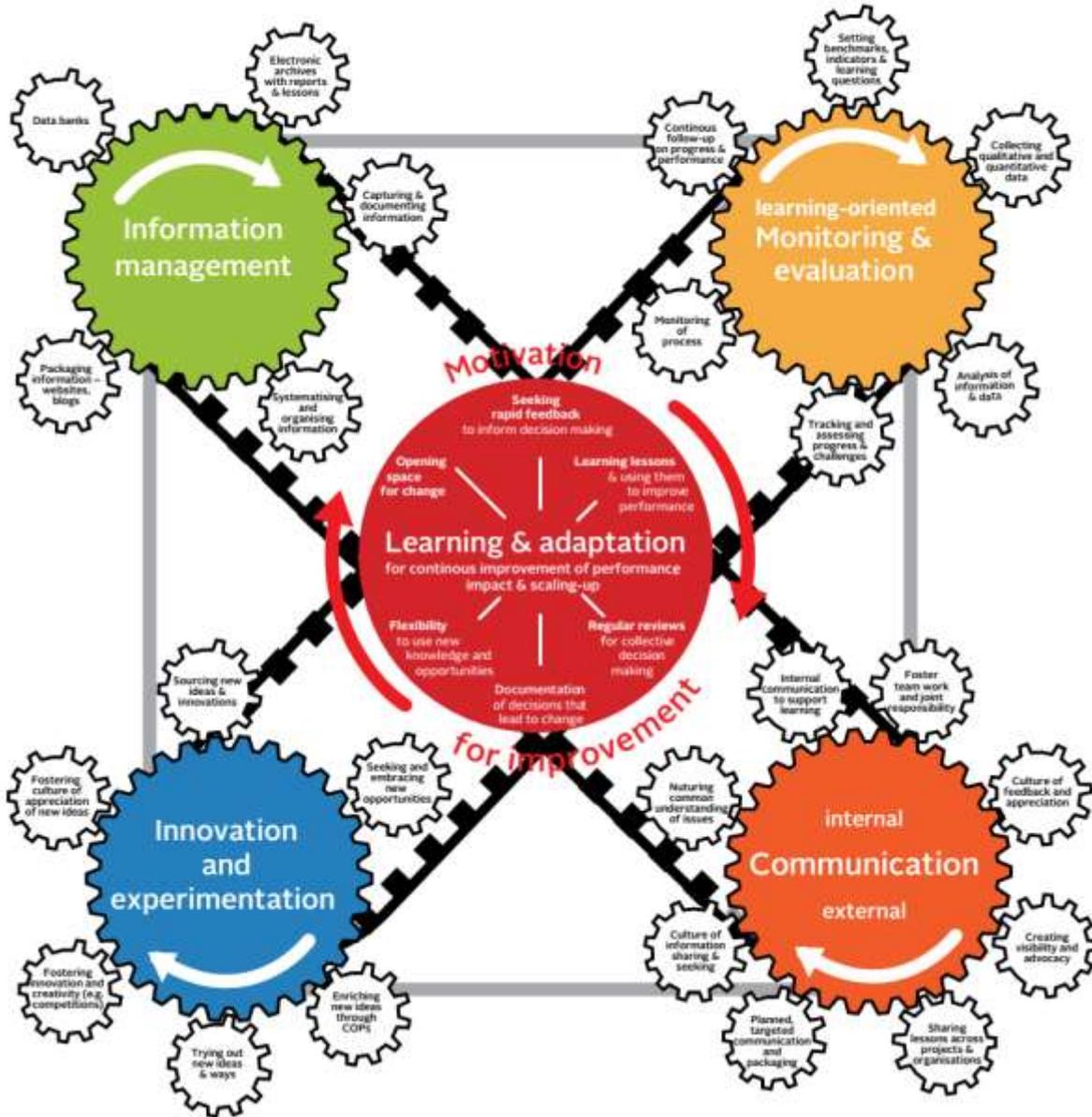


Figure 1 Integrated Knowledge Management and Learning System

Appendix A. Complementary Areas of IFAD and UN Women in Hu’nan Rural Revitalization Demonstration Project (H2RDP).

	UN Women	IFAD	Potential linkage / complementarities
Overall Technical Expertise/ value added	<p>Triple mandate endows it with a unique capacity to:</p> <ul style="list-style-type: none"> • Support the strengthening of global norms and standards. • Promote more effective coordination, coherence and gender mainstreaming across the UN system in support of commitment for gender equality and women’ s empowerment. • Support member states, upon requests, to translate global norms and standards into legislation, policies and development plans at the regional, national and local levels as part of its operational activities. 	<ul style="list-style-type: none"> • Boost farmers’ income, • Empower rural poor to participate in market oriented farming and off-farm activities • Achieve sustainable management of natural resources • Upgrade agricultural infrastructure • Have specific gender policy 	<p>IFAD and UN Women will work together to leverage and integrate gender and climate change activities into both agencies’ work to maximize women’ s benefits.</p> <p>IFAD will focus on Component 1: Inclusive Private Sector Investment Models; Component 2: Climate-proofed Public Infrastructure and Improvement of Rural Living Condition; and Component 3: Project Management, Knowledge Management, M&E and Policy.</p> <p>UN Women will provide substantive technical support on gender along with the Hu’ nan project implementation under each component. UN Women will also focus on women to address their needs, barriers, and opportunities in agricultural inputs and outputs, and processing and</p>
Key Project Component	<p>More women farmers in the project sites in Hu’ nan Province have increased income security and are more resilient in a changing climate through increased capacity and accessibility to productive inputs and collective efforts to move up agricultural value chain.</p>	<p>Improved livelihood opportunities and increased resilience to the impacts of climate change for vulnerable rural people in the project area, particularly youth and women.</p> <ul style="list-style-type: none"> • Strengthening and providing incentives to New Economic 	

	<ul style="list-style-type: none"> • Women farmers have increased access to financial and economic resources and are able to utilize agricultural services to increase their productivity. • Women farmers and network of women farmer organizations have increased capacity to move up the agricultural value chains. • Government and services providers, particularly at the local level, have enhanced capacity to support women farmers to access climate-smart agricultural extension, information, tools and technologies. 	<p>Entities to include poor households among their members, and introduce fair shareholding and benefit-sharing mechanisms.</p> <ul style="list-style-type: none"> • Stimulating additional and more diversified income opportunities, particularly for young and women, in the project area, by providing business services and stimulating and strengthening entrepreneurship opportunities and capacities. • Addressing some of the major gaps in the current infrastructure system in the project area which may limit or constrain the implementation of the proposed project activities. Climate change considerations will be mainstreamed throughout the project by strengthening the capacity of the government and beneficiaries to assess climate risks and identify adaptation options and plan and decide accordingly, and improving the climate-resilience of the infrastructure system. 	<p>marketing; as well as empower women to establish their own organizations for collective actions and benefits.</p>
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<p>Target Beneficiaries</p>	<ul style="list-style-type: none"> • Poor women smallholder farmers • Women farmers’ community members, including men and boys, girls, and aged groups • Government and service providers, including members of Provincial Department of Agriculture, Women’s Federation, and Agriculture Extension 	<ul style="list-style-type: none"> • Poor smallholder farmers with a potential for high-value/locally featured products • Disadvantaged and vulnerable but economically capable poor (women, youth, ethnic minorities) • In total, the project is expected to directly benefit an estimated 155,000 individuals, out of which about 17 percent are formerly registered poor, 40 percent women, 36 percent youth, and 20 percent belong to ethnic minorities (i.e. direct beneficiaries). The project is expected to indirectly benefit about 465,000 people inside the project area within 98,000 households. 	
<p>Partners</p>	<ul style="list-style-type: none"> • UN Women possesses the largest pool of expertise in gender equality and women’s empowerment in the UN. • UN Women longstanding relationship with government and women’s federation at all levels. • UN Women has a well-established partnership with IFAD, Hunan Department of Agriculture and influential research institutes for conducting gender, poverty reduction and rural development 	<ul style="list-style-type: none"> • Lead implementing agency is the Provincial Department of Agriculture and Rural Affairs (DARA), specifically, the Hunan Agricultural Foreign Economic Cooperation Center within DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). • Major implementation responsibilities of the project 	

	<p>studies and programmes throughout the project area.</p>	<p>lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs</p> <ul style="list-style-type: none"> • The Women Federation (WF) and Youth League (YL) in the counties will be also be assigned responsibilities in undertaking women and youth related activities 	
<p>Complementary and Reinforcing</p>	<ul style="list-style-type: none"> • Enhancing capacity of service providers to support women farmers, and further to influence policy in promoting women farmers’ income security and are more resilient in a changing climate. • Increasing women’ s farmers’ access to financial and productive resources, utilizing the Farmer Field Schools and Women’ s Associations/Women Farmer’ Cooperatives. • Strengthen collective engagement and positioning of women farmers and their networks, including women’ s farmer organizations and associations in order to have a higher value processing of the products and better bargaining power in the markets. 	<ul style="list-style-type: none"> • Improving the government’ s currently predominant ’poverty reduction through industrialization’ model • Strengthening the role and capacity of the New Economic Entities, with particular attention to professional farmer cooperatives, to act as a vehicle/entry point for pursuing inclusiveness through agribusiness development. • Promoting the adoption of a ’market driven’ approach (i.e. it will support business entities to identify and respond to markets’ demands). 	

	<ul style="list-style-type: none"> • Capacity building for women farmer organizations to move up the agricultural value chains. 		
<p>Indicative Gender Transformative Activities</p>	<p>Component 1: Inclusive Private Sector Investment Models</p> <p>A.1 Demonstrating Inclusive Rural Business Development</p> <ul style="list-style-type: none"> • Identify and support with investment to women-dominated/led cooperatives/business • Develop women entrepreneur network among the project area and outside to facilitate experience sharing • Strengthen linkages between women farmer networks and customers through public and private sectors, local markets and digital platforms to develop existing and cultivate new women-led businesses. • Assess, analyze and document women’s contribution, best practices and experiences in agriculture and agricultural related businesses based on the trainings, dialogues and evidence-based interventions. <p>A.2 Providing Rural Business Development Services</p> <ul style="list-style-type: none"> • Provide technical support to women associations/cooperatives. Conduct tailor-made training for facilitators/leaders of women’s associations as role models on skills related to entrepreneurship, organizational leadership and confidence-building, communication, information, monitoring and management capacity. • Facilitate dialogue and foster partnerships between women farmers, trainers and experts, local governments, private sectors, and women’s federation for sustainable development of women farmers’ knowledge and skills. • Advocate for Women’s Empowerment Principles (WEPs) among local business cooperatives, and support local women with more job opportunities nearby their communities. <p>A.3 Professional Farmer Training</p> <ul style="list-style-type: none"> • Facilitate the formation of Farmer Field Schools (FFSs) and Women’s Associations with selected women leaders/facilitators and registered women smallholders. • Provide trainings on a) gender awareness, b) climate smart agricultural technologies c) agriculture marketing (value added products) d) financial/business and entrepreneurship skills to target farmer groups including members of women associations. • With the selected smallholders as convergence point/facilitators, technology transfer to other women farmers will be carried out during a complete production cycle. Others will be encouraged to learn from each other and share experiences among themselves. • Conduct community advocacy campaigns and raise women smallholders’ awareness on collective power in access to information and markets. <p>Component 2: Climate-proofed Public Infrastructure and Improvement of Rural Living Condition</p>		

	<ul style="list-style-type: none"> • Conduct Gender and Climate Change Trainings to farmers, including women farmers and their networks. • Conduct trainings of trainers (TOT) on gender and climate change for grassroots agriculture extension workers and technicians, and other service providers to better address specific challenges faced by women farmers, and to serve and train individual women farmers in their respective counties and villages. • Facilitate more women benefited from the infrastructure construction through strengthened dialogues among women farmers, women’ s associations and project management team <p>Component 3: Project Management, Knowledge Management, M&E and Policy</p> <ul style="list-style-type: none"> • Design and conduct a baseline survey to identify the specific challenges and needs of women farmers in the pilot sites in relation to local climate change impacts, local agricultural production, and local poverty reduction needs and capacities. • Design and organize training sessions on gender awareness, project management and other related knowledge and skills, based on findings from the baseline survey, for local government officials in agriculture/poverty alleviation system and women’ s federations to enhance understandings and equip skills to provide better service delivery to women farmers. • Organize international conference together with line ministries or other government officials to elaborate women’ s role and contribution in poverty alleviation, explore innovative and practical modalities of women’ s empowerment in a changing climate, and discuss on necessary policy reforms and commitments from the government.
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Chapter 7: Project Costing and Financing

251. **Project costs:** The total project cost is estimated at US\$ 173 million, including contingencies. The total base cost is US\$ 167 million; physical and price contingencies account for an estimated US\$ 6 million (i.e. 4 percent of the total base cost or 3.4 percent of the total project cost). Project costs are allocated among the three components as follows: (A) Inclusive Private Sector Investment Models (52.5 percent of the total project cost); (B) Climate-proofed Public Infrastructure Planning, Development and Improvement (40.4 percent of the total cost); and (C) Project Management, Knowledge Management, M&E, and Policy (7.2 percent of the total cost). Project Cost Summary by Components, Project Costs per component and sub-component and financier are summarized in the cost tables 8 & 9 given below.
252. **Project financing and co-financing:** IFAD will contribute to the project with a loan for a total amount of US\$ 60.2 million (35 percent of the total project cost). The Government will contribute US\$ 90.86 million (52.5 percent of the total cost), and the Private Sector, i.e. participating enterprises and NEEs , are expected to contribute approximately US\$ 21.4 million (12.4 percent of the total cost). The beneficiaries' contribution is expected to be approximately US\$ 0.45 million (0.3 percent of the total cost). Costs by expenditure account are presented in Table 10 & 11 .
253. **Co-financing ratio:** The IFAD loan has a co-financing ratio of approximately 1:1.88. This is about 30% above the IFAD11 target of 1:1.4 (and more than twice above the 1:0.8 target for domestic co-financing)
254. **Assumptions:** Key assumptions used in estimating the project costs include (i) price contingencies assumed at 2.5% and applied on all items, except for Project Management; (ii) exchange rate at CNY 7.02 per USD and foreign inflation rate at 2%; (iii) a FIVE year implementation phase and the project starting in January 2021; (iv) all unit costs are input in Chinese Yuen, i.e. CNY; (v) taxes included in IFAD financing rules and (vi) shadow exchange ratio at 1; and (vii) cost tables are presented in China fiscal year which corresponds to Calendar Year.
255. **Basis for Unit costs:** Unit costs for all detailed Tables were provided by the respective counties, in particular for the Component-2, Climate proofed public infrastructure activities. Operations and maintenance costs for these interventions have been assumed at 1% of annual investment costs. Unit costs for Component 1: Support to inclusive rural development were developed in consultation with the respective Counties during the field visits and refined with the Provincial PMO. In doing so, some adjustments have been made but otherwise, total average expenditure for this component is more or less identical. Unit costs for the Component 3, Project Management, M&E, KM and Policy were provided by the Provincial PMO and these are all based on real time expenditures.

256. **Costab accounts:** Costab accounts are organised into following three accounts: (i) Procurement accounts, (ii) Disbursement accounts and (iii) Expenditure accounts. Accordingly, following accounts have been created in accordance with the project expenditure categories and the project financing arrangements:

Procurement accounts (PA) a/	Disbursement accounts (DA)	Expenditure accounts (EA)
<i>Civil work_PA</i>	<i>Civil work_DA</i>	<i>Civil work_EA</i>
<i>Smart Civil work_PA</i>	<i>Smart Civil work_DA</i>	<i>Smart Civil work_EA</i>
<i>Equipment and materials_PA</i>	<i>Equipment and materials_DA</i>	<i>Equipment and materials_EA</i>
<i>Training, capacity building and TA_PA</i>	<i>Training, capacity building and TA_DA</i>	<i>Training, capacity building and TA_EA</i>
<i>Goods, services and inputs_PA</i>	<i>Goods, services and inputs_DA</i>	<i>Goods, services and inputs_EA</i>
<i>Grants and subsidy_PA</i>	<i>Grants and subsidy_DA</i>	<i>Grants and subsidy_EA</i>
<i>Salary and allowances_PA</i>	<i>Salary and allowances_DA</i>	<i>Salary and allowances_EA</i>
<i>Operating costs_PA</i>	<i>Operating costs_DA</i>	<i>Operating costs_EA</i>
<i>Operations and maintenance_PA</i>	<i>Operations and maintenance_DA</i>	<i>Operations and maintenance_EA</i>
a/ in Summary and Detailed tables, these accounts will end up with PA, DA & EA respectively		

257. **H2RDP Project accounts:** The project has three expenditure components including the project management and 5 sub-components. Cost Tables have according organised, prepared and provided in following pages: (i) first Summary Tables for components, and (ii) detailed Tables by Components and sub-components.

258. **Summary Tables:** These Tables are presented summarising all components by financiers (that is GOC, IFAD, PRIVATE SECTOR and BENEFICIARIES) under the project in thousand USD currency units. (Tab file: *H2RDP_components6.tab*)

259. **Detailed Cost Tables:** Each Detailed Table contains the following data and information relating to the project interventions and activities. These are description of an activity, unit, physical quantities by year, unit cost in CNY and USD, base costs in thousand USD currency unit, total costs including contingencies in thousand USD, percentage of disbursement account and financing rule (ie % of financing by Government, IFAD, private sector and the beneficiaries).

Components	Sub-components	Cost Table reference #
Inclusive private sector investments	a. Inclusive rural business development	1.1
	b. Rural business development services	1.2
	c. Professional farmer training	1.3
Climate-proofed public infrastructure	a. Climate resilient infrastructure	2.1
	b. Rural infrastructure	2.2
Project Management, M&E, KM and Policy	Project management, M&E, KM and Policy	3.1

260. IFAD Financing categories and proposed financing rules are shown in the Table below

China H2RDP Design mission Disbursement Accounts by IFAD	Total Amount	IFAD Amount	Financing rule %
Works	53,569	0	
Smart civil works	15,385	12,083	100
Training, workshops and goods, services	17,690	12,319	100
Grants and subsidies	78,495	34,509	100
Operating costs and salaries	7,835	1,288	100
Total	1,72,974	60,199	100

- (i) All civil works items are categorized under “smart civil works” category
- (ii) Expenditure categories Training and workshop and goods, services and inputs have been combined in to one disbursement category
- (iii) All grants to new business entities (BPs) and startup support to women and youth are categorized under Grant and subsidy
- (iv) All operating costs and staff salaries are categorized under “Operating costs and salaries”

Abbreviations used in costab Tables

SCW	Smart Civil work carried out under climate resilience
CW	Civil work
TWC	Training, workshop, capacity building and TA
GAS	Grant and subsidy
GSI	Goods, services and inputs
EAM	Equipment and materials
SAA	Salary and allowances
OPC	Office operating costs
OAM	Operations and maintenance
DA	Disbursement account

261. **Retroactive financing:** Retroactive expenditures are pre-financed by the borrower and such provisions are made to mitigate the risks of start-up delays and facilitate prompt execution of the project. As an exception to the General Conditions for agricultural development financing, IFAD will be seeking IFAD Executive Board approval for retroactive financing from the loan up to a **maximum of 10% of the total IFAD financing (i.e US\$ 6 million) for eligible expenditures incurred as from the date which the design document got approval by Quality assurance group to the date of the entry in force of the financing agreement.** Eligible expenditures for retroactive financing are considered those incurred to finance the start-up and preparation project activities such as : (i) purchase of essential items (including equipment and procurement of MIS system) for the PMOs; (ii) recruitment of project staff; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the program implementation manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) training and technical assistance for cooperatives, including recruitment of service providers, cooperative support field officers, technical advisors for business plans development, brokers/facilitators for linkages with supermarkets; and value-chain officers and monitoring & evaluation officers; and (ix) business plans.
262. **Financing of taxes:** In order to improve the efficiency of funds flow and better support project implementation, IFAD’s funds may be used to finance taxes that are not “excessive, discriminatory or otherwise unreasonable”. In case the Government intends to use IFAD financing to finances taxes that is impossible or impractical to exempt, the Government would need to formalize such request in writing.

PIM – H2RDP: Project cost and financing**Summary tables H2RDP (from Component costables)****Table 8: Project Cost Summary by Components (L/C CNY '000 & US '000)**

China H2RDP Design mission Components Project Cost Summary		(CNY '000)			(US\$ '000)			%	% Total
		Local	Foreign	Total	Local	Foreign	Total	Foreign Exchange	Base Costs
A. Components									
1. Inclusive private sector investment									
a. Inclusive rural business development	531,398	-	531,398	75,698	-	75,698	-	45	
b. Rural business development services	64,938	-	64,938	9,250	-	9,250	-	6	
c. Professional farmer training	17,283	-	17,283	2,462	-	2,462	-	1	
Subtotal Inclusive private sector investment	613,618	-	613,618	87,410	-	87,410	-	52	
2. Climate proof public infrastructure									
a. Climate resilient infrastructure	103,697	-	103,697	14,772	-	14,772	-	9	
b. Rural infrastructure	368,210	-	368,210	52,452	-	52,452	-	31	
Subtotal Climate proof public infrastructure	471,907	-	471,907	67,223	-	67,223	-	40	
3. Project Management, KM, M&E and policy									
a. PMO	86,940	-	86,940	12,385	-	12,385	-	7	
Total BASELINE COSTS	1,172,465	-	1,172,465	167,018	-	167,018	-	100	
Physical Contingencies	-	-	-	-	-	-	-	-	
Price Contingencies	41,810	-	41,810	5,956	-	5,956	-	4	
Total PROJECT COSTS	1,214,274	-	1,214,274	172,974	-	172,974	-	104	

Table 9: Project Costs by Component (and sub-components) and Financier (US\$ '000)

China H2RDP Design mission Components by Financiers													
(US\$ '000)													
GoC		IFAD		Private sector		Beneficiaries		Total		For.	Local	Duties &	
Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	(Excl. Taxes)	Taxes	
A. Components													
1. Inclusive private sector investment													
a. Inclusive rural business development	22,519	28.7	34,509	44.0	21,468	27.3	-	-	78,495	45.4	-	78,495	-
b. Rural business development services	684	7.1	8,925	92.9	-	-	-	-	9,609	5.6	-	9,609	-
c. Professional farmer training	-	-	2,628	100.0	-	-	-	-	2,628	1.5	-	2,628	-
Subtotal Inclusive private sector investment	23,203	25.6	46,062	50.8	21,468	23.7	-	-	90,732	52.5	-	90,732	-
2. Climate proof public infrastructure													
a. Climate resilient infrastructure	3,302	21.5	12,083	78.5	-	-	-	-	15,385	8.9	-	15,385	-
b. Rural infrastructure	54,020	99.2	-	-	-	-	452	0.8	54,472	31.5	-	54,472	-
Subtotal Climate proof public infrastructure	57,322	82.1	12,083	17.3	-	-	452	0.6	69,857	40.4	-	69,857	-
3. Project Management, KM, M&E and policy													
a. PMO	10,330	83.4	2,054	16.6	-	-	-	-	12,385	7.2	-	12,385	-
Total PROJECT COSTS	90,855	52.5	60,199	34.8	21,468	12.4	452	0.3	172,974	100.0	-	172,974	-

Table 10: Project Costs by Expenditure category and Financier (US\$ '000)

Expenditure Accounts by Financiers		(US\$ '000)												
		GoC		IFAD		Private sector		Beneficiaries		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
I. Investment Costs														
A. Expenditure accounts														
1. Works	53,569	100.0	-	-	-	-	-	-	53,569	31.0	-	53,569	-	
2. Smart civil work	3,302	21.5	12,083	78.5	-	-	-	-	15,385	8.9	-	15,385	-	
3. Equipment and materials	-	-	340	100.0	-	-	-	-	340	0.2	-	340	-	
4. Training and workshops	5,228	53.1	4,627	46.9	-	-	-	-	9,855	5.7	-	9,855	-	
5. Goods, services and inputs	142	1.9	7,352	98.1	-	-	-	-	7,494	4.3	-	7,494	-	
6. Grants and subsidies	22,519	28.7	34,509	44.0	21,468	27.3	-	-	78,495	45.4	-	78,495	-	
Total Investment Costs	84,760	51.3	58,911	35.7	21,468	13.0	-	-	165,139	95.5	-	165,139	-	
II. Recurrent Costs														
A. operating costs														
1. Salaries and allowances	1,745	67.0	860	33.0	-	-	-	-	2,605	1.5	-	2,605	-	
2. Operating costs	4,315	83.1	427	8.2	-	-	452	8.7	5,194	3.0	-	5,194	-	
3. Operations and maintenance	36	100.0	-	-	-	-	-	-	36	-	-	36	-	
Total Recurrent Costs	6,095	77.8	1,288	16.4	-	-	452	5.8	7,835	4.5	-	7,835	-	
Total PROJECT COSTS	90,855	52.5	60,199	34.8	21,468	12.4	452	0.3	172,974	100.0	-	172,974	-	

Table 11: Project Costs by Component (and sub-components) and Expenditure category (US\$ '000)

China H2RDP Design mission Expenditure Accounts by Components - Base (US\$ '000)		Components							Physical Contingencies Total % Amount	
		Inclusive private sector investment		Professional farmer training	Climate proof public infrastructure		Project Management, KM, M&E and policy PMO			
Inclusive rural business development	Rural business development services	Climate resilient infrastructure	Rural infrastructure		Total	%		Amount		
I. Investment Costs										
A. Expenditure accounts										
1. Works	-	-	-	-	51,548	-	51,548	-	-	
2. Smart civil work	-	-	-	14,772	-	-	14,772	-	-	
3. Equipment and materials	-	-	-	-	-	340	340	-	-	
4. Training and workshops	-	910	2,462	-	-	6,299	9,671	-	-	
5. Goods, services and inputs	-	6,625	-	-	-	528	7,154	-	-	
6. Grants and subsidies	75,698	-	-	-	-	-	75,698	-	-	
Total Investment Costs	75,698	7,535	2,462	14,772	51,548	7,168	159,183	-	-	
II. Recurrent Costs										
A. operating costs										
1. Salaries and allowances	-	860	-	-	-	1,745	2,605	-	-	
2. Operating costs	-	855	-	-	903	3,436	5,194	-	-	
3. Operations and maintenance	-	-	-	-	-	36	36	-	-	
Total Recurrent Costs	-	1,715	-	-	903	5,217	7,835	-	-	
Total BASELINE COSTS	75,698	9,250	2,462	14,772	52,452	12,385	167,018	-	-	
Physical Contingencies	-	-	-	-	-	-	-	-	-	
Price Contingencies	2,798	359	166	614	2,020	-	5,956	-	-	
Total PROJECT COSTS	78,495	9,609	2,628	15,385	54,472	12,385	172,974	-	-	
Taxes	-	-	-	-	-	-	-	-	-	
Foreign Exchange	-	-	-	-	-	-	-	-	-	

Table 12: H2RDP Disbursement Accounts by Financiers

		(CNY '000)										(US\$ '000)										
		GoC		IFAD		Private sector		Beneficiaries		Total		GoC		IFAD		Private sector		Beneficiaries		Total		
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
China																						
H2RDP Design mission																						
Disbursement Accounts by Financiers																						
A. Disbursement accounts																						
1. works	3,76,051	100.0	-	-	-	-	-	-	-	3,76,051	31.0	53,569	100.0	-	-	-	-	-	-	-	53,569	31.0
2. Smart civil work	23,180	21.5	84,825	78.5	-	-	-	-	-	1,08,004	8.9	3,302	21.5	12,083	78.5	-	-	-	-	-	15,385	8.9
3. Equipment and materials	-	-	2,390	100.0	-	-	-	-	-	2,390	0.2	-	-	340	100.0	-	-	-	-	-	340	0.2
4. Training and workshops	36,700	53.1	32,480	46.9	-	-	-	-	-	69,180	5.7	5,228	53.1	4,627	46.9	-	-	-	-	-	9,855	5.7
5. Goods, services and inputs	1,000	1.9	51,611	98.1	-	-	-	-	-	52,611	4.3	142	1.9	7,352	98.1	-	-	-	-	-	7,494	4.3
6. Grants and subsidies	1,58,082	28.7	2,42,252	44.0	1,50,703	27.3	-	-	-	5,51,037	45.4	22,519	28.7	34,509	44.0	21,468	27.3	-	-	-	78,495	45.4
7. Salaries and allowances	12,250	67.0	6,040	33.0	-	-	-	-	-	18,290	1.5	1,745	67.0	860	33.0	-	-	-	-	-	2,605	1.5
8. Operating costs	30,290	83.1	3,000	8.2	-	-	-	3,170	8.7	36,461	3.0	4,315	83.1	427	8.2	-	-	-	452	8.7	5,194	3.0
9. Operations and maintenance	250	100.0	-	-	-	-	-	-	-	250	-	36	100.0	-	-	-	-	-	-	-	36	-
Total PROJECT COSTS	6,37,803	52.5	4,22,598	34.8	1,50,703	12.4	3,170	0.3	12,14,274	100.0	90,855	52.5	60,199	34.8	21,468	12.4	452	0.3	1,72,974	100.0		

Table 13: H2RDP Components by Financiers

China H2RDP Design mission Components by Financiers		(US\$ '000)																		
		(CNY '000)																		
		GoC		IFAD		Private sector		Beneficiaries		Total		GoC		IFAD		Private sector		Beneficiaries		Total
Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	
A. Components																				
1. Inclusive private sector investment																				
a. Inclusive rural business development	1,58,082	28.7	2,42,252	44.0	1,50,703	27.3	-	-	5,51,037	45.4	22,519	28.7	34,509	44.0	21,468	27.3	-	-	78,495	45.4
b. Rural business development services	4,800	7.1	62,654	92.9	-	-	-	-	67,454	5.6	684	7.1	8,925	92.9	-	-	-	-	9,609	5.6
c. Professional farmer training	-	-	18,447	100.0	-	-	-	-	18,447	1.5	-	-	2,628	100.0	-	-	-	-	2,628	1.5
Subtotal Inclusive private sector investment	1,62,882	25.6	3,23,353	50.8	1,50,703	23.7	-	-	6,36,938	52.5	23,203	25.6	46,062	50.8	21,468	23.7	-	-	90,732	52.5
2. Climate proof public infrastructure																				
a. Climate resilient infrastructure	23,180	21.5	84,825	78.5	-	-	-	-	1,08,004	8.9	3,302	21.5	12,083	78.5	-	-	-	-	15,385	8.9
b. Rural infrastructure	3,79,222	99.2	-	-	-	-	3,170	0.8	3,82,392	31.5	54,020	99.2	-	-	-	-	452	0.8	54,472	31.5
Subtotal Climate proof public infrastructure	4,02,401	82.1	84,825	17.3	-	-	3,170	0.6	4,90,396	40.4	57,322	82.1	12,083	17.3	-	-	452	0.6	69,857	40.4
3. Project Management, KM, M&E and policy																				
a. PMO, CPMOs & Prefecture	72,520	83.4	14,420	16.6	-	-	-	-	86,940	7.2	10,330	83.4	2,054	16.6	-	-	-	-	12,385	7.2
Total PROJECT COSTS	6,37,803	52.5	4,22,598	34.8	1,50,703	12.4	3,170	0.3	12,14,274	100.0	90,855	52.5	60,199	34.8	21,468	12.4	452	0.3	1,72,974	100.0

Table 14: Expenditure accounts by financiers

Expenditure Accounts by Financiers		(CNY '000)										(US\$ '000)									
		GoC		IFAD		Private sector		Beneficiaries		Total		GoC		IFAD		Private sector		Beneficiaries		Total	
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs																					
A. Expenditure accounts																					
1. Works	3,76,051	100.0	-	-	-	-	-	-	-	3,76,051	31.0	53,569	100.0	-	-	-	-	-	-	53,569	31.0
2. Smart civil work	23,180	21.5	84,825	78.5	-	-	-	-	1,08,004	8.9	3,302	21.5	12,083	78.5	-	-	-	-	-	15,385	8.9
3. Equipment and materials	-	-	2,390	100.0	-	-	-	-	2,390	0.2	-	-	340	100.0	-	-	-	-	-	340	0.2
4. Training and workshops	36,700	53.1	32,480	46.9	-	-	-	-	69,180	5.7	5,228	53.1	4,627	46.9	-	-	-	-	-	9,855	5.7
5. Goods, services and inputs	1,000	1.9	51,611	98.1	-	-	-	-	52,611	4.3	142	1.9	7,352	98.1	-	-	-	-	-	7,494	4.3
6. Grants and subsidies	1,58,082	28.7	2,42,252	44.0	1,50,703	27.3	-	-	5,51,037	45.4	22,519	28.7	34,509	44.0	21,468	27.3	-	-	-	78,495	45.4
Total Investment Costs	5,95,013	51.3	4,13,558	35.7	1,50,703	13.0	-	-	11,59,274	95.5	84,760	51.3	58,911	35.7	21,468	13.0	-	-	1,65,139	95.5	
II. Recurrent Costs																					
A. operating costs																					
1. Salaries and allowances	12,250	67.0	6,040	33.0	-	-	-	-	18,290	1.5	1,745	67.0	860	33.0	-	-	-	-	-	2,605	1.5
2. Operating costs	30,290	83.1	3,000	8.2	-	-	3,170	8.7	36,461	3.0	4,315	83.1	427	8.2	-	-	452	8.7	5,194	3.0	
3. Operations and maintenance	250	100.0	-	-	-	-	-	250	-	36	100.0	-	-	-	-	-	-	-	36	-	
Total Recurrent Costs	42,790	77.8	9,040	16.4	-	-	3,170	5.8	55,000	4.5	6,095	77.8	1,288	16.4	-	-	452	5.8	7,835	4.5	
Total PROJECT COSTS	6,37,803	52.5	4,22,598	34.8	1,50,703	12.4	3,170	0.3	12,14,274	100.0	90,855	52.5	60,199	34.8	21,468	12.4	452	0.3	1,72,974	100.0	

Table 15: H2RDP Expenditure accounts project cost summary

China H2RDP Design mission Expenditure Accounts Project Cost Summary		(CNY '000)			(US\$ '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total			
I. Investment Costs									
A. Expenditure accounts									
1. Works	3,61,869	-	3,61,869	51,548	-	51,548	-	31	
2. Smart civil work	1,03,697	-	1,03,697	14,772	-	14,772	-	9	
3. Equipment and materials	2,390	-	2,390	340	-	340	-	-	
4. Training and workshops	67,893	-	67,893	9,671	-	9,671	-	6	
5. Goods, services and inputs	50,218	-	50,218	7,154	-	7,154	-	4	
6. Grants and subsidies	5,31,398	-	5,31,398	75,698	-	75,698	-	45	
Total Investment Costs	11,17,464	-	11,17,464	1,59,183	-	1,59,183	-	95	
II. Recurrent Costs									
A. operating costs									
1. Salaries and allowances	18,290	-	18,290	2,605	-	2,605	-	2	
2. Operating costs	36,461	-	36,461	5,194	-	5,194	-	3	
3. Operations and maintenance	250	-	250	36	-	36	-	-	
Total Recurrent Costs	55,000	-	55,000	7,835	-	7,835	-	5	
Total BASELINE COSTS	11,72,465	-	11,72,465	1,67,018	-	1,67,018	-	100	
Physical Contingencies	-	-	-	-	-	-	-	-	
Price Contingencies	41,810	-	41,810	5,956	-	5,956	-	4	
Total PROJECT COSTS	12,14,274	-	12,14,274	1,72,974	-	1,72,974	-	104	

Table 16: Project cost summary: IFAD financing %

China H2RDP Design mission Project Cost Summary (US\$ '000)				
	Cost Including Contingencies	% of Total	IFAD Financing	% Financing
A. Components				
1. Inclusive private sector investment				
a. Inclusive rural business development	78,495	45.4	34,509	44.0
b. Rural business development services	9,609	5.6	8,925	92.9
c. Professional farmer training	2,628	1.5	2,628	100.0
Subtotal Inclusive private sector investment	90,732	52.5	46,062	50.8
2. Climate proof public infrastructure				
a. Climate resilient infrastructure	15,385	8.9	12,083	78.5
b. Rural infrastructure	54,472	31.5	-	-
Subtotal Climate proof public infrastructure	69,857	40.4	12,083	17.3
3. Project Management, KM, M&E and policy				
a. PMO, CPMOs & Prefecture	12,385	7.2	2,054	16.6
Total PROJECT COSTS	1,72,974	100.0	60,199	34.8

Table 17: Expenditure accounts by components

China H2RDP Design mission Expenditure Accounts by Components - Base (US\$ '000)		Components							Physical Contingencies % Amount	
		private sector investment		Professional farmer training	Climate proof public infrastructure		Rural infrastructure	Project Management, KM, M&E and policy PMO		
Inclusive rural business development	Rural business development services	Climate resilient infrastructure	Rural infrastructure		Climate resilient infrastructure	Rural infrastructure			Project Management, KM, M&E and policy PMO	Total
I. Investment Costs										
A. Expenditure accounts										
1. Works	-	-	-	-	51,548	-	-	51,548	-	-
2. Smart civil work	-	-	-	14,772	-	-	-	14,772	-	-
3. Equipment and materials	-	-	-	-	-	340	-	340	-	-
4. Training and workshops	-	910	2,462	-	-	6,299	-	9,671	-	-
5. Goods, services and inputs	-	6,625	-	-	-	528	-	7,154	-	-
6. Grants and subsidies	75,698	-	-	-	-	-	-	75,698	-	-
Total Investment Costs	75,698	7,535	2,462	14,772	51,548	7,168	-	1,59,183	-	-
II. Recurrent Costs										
A. operating costs										
1. Salaries and allowances	-	860	-	-	-	1,745	-	2,605	-	-
2. Operating costs	-	855	-	-	903	3,436	-	5,194	-	-
3. Operations and maintenance	-	-	-	-	-	36	-	36	-	-
Total Recurrent Costs	-	1,715	-	-	903	5,217	-	7,835	-	-
Total BASELINE COSTS	75,698	9,250	2,462	14,772	52,452	12,385	-	1,67,018	-	-
Physical Contingencies	-	-	-	-	-	-	-	-	-	-
Price Contingencies	2,798	359	166	614	2,020	-	-	5,956	-	-
Total PROJECT COSTS	78,495	9,609	2,628	15,385	54,472	12,385	-	1,72,974	-	-

Table 18: Project components by year –baseline costs

China H2RDP Design mission Project Components by Year -- Base Costs												
	Base Cost (CNY '000)					Base Cost (US\$ '000)						
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
A. Components												
1. Inclusive private sector investment												
a. Inclusive rural business development	1,79,730	1,93,819	1,57,849	-	-	5,31,398	25,603	27,609	22,486	-	-	75,698
b. Rural business development services	14,119	22,149	13,355	10,213	5,102	64,938	2,011	3,155	1,902	1,455	727	9,250
c. Professional farmer training	2,826	3,456	3,623	3,689	3,689	17,283	403	492	516	525	525	2,462
Subtotal Inclusive private sector investment	1,96,675	2,19,423	1,74,827	13,902	8,791	6,13,618	28,016	31,257	24,904	1,980	1,252	87,410
2. Climate proof public infrastructure												
a. Climate resilient infrastructure	30,328	38,606	23,247	8,612	2,905	1,03,697	4,320	5,499	3,311	1,227	414	14,772
b. Rural infrastructure	89,442	1,21,108	85,275	47,335	25,050	3,68,210	12,741	17,252	12,147	6,743	3,568	52,452
Subtotal Climate proof public infrastructure	1,19,770	1,59,714	1,08,522	55,947	27,954	4,71,907	17,061	22,751	15,459	7,970	3,982	67,223
3. Project Management, KM, M&E and policy												
a. PMO	19,643	16,666	17,016	16,716	16,898	86,940	2,798	2,374	2,424	2,381	2,407	12,385
Total BASELINE COSTS	3,36,089	3,95,803	3,00,364	86,564	53,644	11,72,465	47,876	56,382	42,787	12,331	7,642	1,67,018
Physical Contingencies	-	-	-	-	-	-	-	-	-	-	-	-
Price Contingencies	3,695	13,286	16,730	5,079	3,019	41,810	526	1,893	2,383	724	430	5,956
Total PROJECT COSTS	3,39,784	4,09,089	3,17,095	91,643	56,663	12,14,274	48,402	58,275	45,170	13,055	8,072	1,72,974

Table 19: Y2RDP Project components by year –total including contingencies

China H2RDP Design mission												
Project Components by Year – Totals Including Contingencie:	Totals Including Contingencies (CNY '000)						Totals Including Contingencies (US\$ '000)					
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
A. Components												
1. Inclusive private sector investment												
a. Inclusive rural business development	1,81,977	2,01,147	1,67,913	-	-	5,51,037	25,923	28,653	23,919	-	-	78,495
b. Rural business development services	14,265	22,868	13,984	10,918	5,419	67,454	2,032	3,258	1,992	1,555	772	9,609
c. Professional farmer training	2,862	3,587	3,854	4,022	4,122	18,447	408	511	549	573	587	2,628
Subtotal Inclusive private sector investment	1,99,103	2,27,602	1,85,751	14,940	9,542	6,36,938	28,362	32,422	26,460	2,128	1,359	90,732
2. Climate proof public infrastructure												
a. Climate resilient infrastructure	30,663	39,976	24,729	9,390	3,246	1,08,004	4,368	5,695	3,523	1,338	462	15,385
b. Rural infrastructure	90,374	1,24,845	89,599	50,597	26,977	3,82,392	12,874	17,784	12,763	7,208	3,843	54,472
Subtotal Climate proof public infrastructure	1,21,037	1,64,821	1,14,328	59,987	30,223	4,90,396	17,242	23,479	16,286	8,545	4,305	69,857
3. Project Management, KM, M&E and policy												
a. PMO	19,643	16,666	17,016	16,716	16,898	86,940	2,798	2,374	2,424	2,381	2,407	12,385
Total PROJECT COSTS	3,39,784	4,09,089	3,17,095	91,643	56,663	12,14,274	48,402	58,275	45,170	13,055	8,072	1,72,974

Table 20: Project components by year – investment and recurrent costs

China H2RDP Design mission Project Components by Year -- Investment/Recurrent Costs												
	Totals Including Contingencies (CNY '000)					Totals Including Contingencies (US\$ '000)						
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
A. Components												
1. Inclusive private sector investment												
a. Inclusive rural business development												
Investment Costs	1,81,977	2,01,147	1,67,913	-	-	5,51,037	25,923	28,653	23,919	-	-	78,495
b. Rural business development services												
Investment Costs	11,857	20,460	11,576	8,510	3,011	55,414	1,689	2,915	1,649	1,212	429	7,894
Recurrent Costs	2,408	2,408	2,408	2,408	2,408	12,040	343	343	343	343	343	1,715
Subtotal Rural business development services	14,265	22,868	13,984	10,918	5,419	67,454	2,032	3,258	1,992	1,555	772	9,609
c. Professional farmer training												
Investment Costs	2,862	3,587	3,854	4,022	4,122	18,447	408	511	549	573	587	2,628
Subtotal Inclusive private sector investment	1,99,103	2,27,602	1,85,751	14,940	9,542	6,36,938	28,362	32,422	26,460	2,128	1,359	90,732
2. Climate proof public infrastructure												
a. Climate resilient infrastructure												
Investment Costs	30,663	39,976	24,729	9,390	3,246	1,08,004	4,368	5,695	3,523	1,338	462	15,385
b. Rural infrastructure												
Investment Costs	88,356	1,23,019	88,479	49,854	26,344	3,76,051	12,586	17,524	12,604	7,102	3,753	53,569
Recurrent Costs	2,018	1,826	1,120	744	632	6,341	287	260	160	106	90	903
Subtotal Rural infrastructure	90,374	1,24,845	89,599	50,597	26,977	3,82,392	12,874	17,784	12,763	7,208	3,843	54,472
Subtotal Climate proof public infrastructure	1,21,037	1,64,821	1,14,328	59,987	30,223	4,90,396	17,242	23,479	16,286	8,545	4,305	69,857
3. Project Management, KM, M&E and policy												
a. PMO												
Investment Costs	12,320	9,342	9,692	9,392	9,575	50,320	1,755	1,331	1,381	1,338	1,364	7,168
Recurrent Costs	7,324	7,324	7,324	7,324	7,324	36,620	1,043	1,043	1,043	1,043	1,043	5,217
Subtotal PMO	19,643	16,666	17,016	16,716	16,898	86,940	2,798	2,374	2,424	2,381	2,407	12,385
Total PROJECT COSTS	3,39,784	4,09,089	3,17,095	91,643	56,663	12,14,274	48,402	58,275	45,170	13,055	8,072	1,72,974
Total Investment Costs	3,28,034	3,97,531	3,06,242	81,168	46,299	11,59,274	46,728	56,628	43,624	11,562	6,595	1,65,139
Total Recurrent Costs	11,750	11,558	10,852	10,476	10,364	55,000	1,674	1,646	1,546	1,492	1,476	7,835

Table 21: Expenditure accounts by year-base costs and contingencies

China H2RDP Design mission Expenditure Accounts by Years -- Base Costs												
	Base Cost (CNY '000)					Total	Base Cost (US\$ '000)					Fore
	2021	2022	2023	2024	2025		2021	2022	2023	2024	2025	
I. Investment Costs												
A. Expenditure accounts												
1. Works	87,424	1,19,282	84,155	46,591	24,417	3,61,869	12,454	16,992	11,988	6,637	3,478	51,548
2. Smart civil work	30,328	38,606	23,247	8,612	2,905	1,03,697	4,320	5,499	3,311	1,227	414	14,772
3. Equipment and materials	2,390	-	-	-	-	2,390	340	-	-	-	-	340
4. Training and workshops	14,012	15,368	13,653	12,339	12,521	67,893	1,996	2,189	1,945	1,758	1,784	9,671
5. Goods, services and inputs	10,455	17,171	10,609	8,547	3,436	50,218	1,489	2,446	1,511	1,218	490	7,154
6. Grants and subsidies	1,79,730	1,93,819	1,57,849	-	-	5,31,398	25,603	27,609	22,486	-	-	75,698
Total Investment Costs	3,24,339	3,84,245	2,89,512	76,089	43,279	11,17,464	46,202	54,736	41,241	10,839	6,165	1,59,183
II. Recurrent Costs												
A. operating costs												
1. Salaries and allowances	3,658	3,658	3,658	3,658	3,658	18,290	521	521	521	521	521	2,605
2. Operating costs	8,042	7,850	7,144	6,768	6,656	36,461	1,146	1,118	1,018	964	948	5,194
3. Operations and maintenance	50	50	50	50	50	250	7	7	7	7	7	36
Total Recurrent Costs	11,750	11,558	10,852	10,476	10,364	55,000	1,674	1,646	1,546	1,492	1,476	7,835
Total BASELINE COSTS	3,36,089	3,95,803	3,00,364	86,564	53,644	11,72,465	47,876	56,382	42,787	12,331	7,642	1,67,018
Physical Contingencies	-	-	-	-	-	-	-	-	-	-	-	-
Price Contingencies	3,695	13,286	16,730	5,079	3,019	41,810	526	1,893	2,383	724	430	5,956
Total PROJECT COSTS	3,39,784	4,09,089	3,17,095	91,643	56,663	12,14,274	48,402	58,275	45,170	13,055	8,072	1,72,974

Table 22: Expenditure accounts by year-total including contingencies

China H2RDP Design mission Expenditure Accounts by Years -- Totals Includ												
	Totals Including Contingencies (CNY '000)						Totals Including Contingencies (US\$ '000)					
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
I. Investment Costs												
A. Expenditure accounts												
1. Works	88,356	1,23,019	88,479	49,854	26,344	3,76,051	12,586	17,524	12,604	7,102	3,753	53,569
2. Smart civil work	30,663	39,976	24,729	9,390	3,246	1,08,004	4,368	5,695	3,523	1,338	462	15,385
3. Equipment and materials	2,390	-	-	-	-	2,390	340	-	-	-	-	340
4. Training and workshops	14,072	15,597	13,884	12,672	12,955	69,180	2,005	2,222	1,978	1,805	1,845	9,855
5. Goods, services and inputs	10,576	17,792	11,238	9,252	3,753	52,611	1,507	2,534	1,601	1,318	535	7,494
6. Grants and subsidies	1,81,977	2,01,147	1,67,913	-	-	5,51,037	25,923	28,653	23,919	-	-	78,495
Total Investment Costs	3,28,034	3,97,531	3,06,242	81,168	46,299	11,59,274	46,728	56,628	43,624	11,562	6,595	1,65,139
II. Recurrent Costs												
A. operating costs												
1. Salaries and allowances	3,658	3,658	3,658	3,658	3,658	18,290	521	521	521	521	521	2,605
2. Operating costs	8,042	7,850	7,144	6,768	6,656	36,461	1,146	1,118	1,018	964	948	5,194
3. Operations and maintenance	50	50	50	50	50	250	7	7	7	7	7	36
Total Recurrent Costs	11,750	11,558	10,852	10,476	10,364	55,000	1,674	1,646	1,546	1,492	1,476	7,835
Total PROJECT COSTS	3,39,784	4,09,089	3,17,095	91,643	56,663	12,14,274	48,402	58,275	45,170	13,055	8,072	1,72,974

Table 23: Financing Investment and Recurrent costs by year: total including contingencies

China H2RDP Design mission												
Financing of Investment/Recurrent	Financing (CNY '000)						Financing (US\$ '000)					
	2021	2022	2023	2024	2025	Total	2021	2022	2023	2024	2025	Total
I. Investment Costs												
GoC	1,56,116	1,96,476	1,50,305	58,234	33,882	5,95,013	22,239	27,988	21,411	8,295	4,827	84,760
IFAD	1,22,119	1,46,056	1,10,033	22,934	12,417	4,13,558	17,396	20,806	15,674	3,267	1,769	58,911
Private sector	49,799	54,999	45,905	-	-	1,50,703	7,094	7,835	6,539	-	-	21,468
Total Investment Costs	3,28,034	3,97,531	3,06,242	81,168	46,299	11,59,274	46,728	56,628	43,624	11,562	6,595	1,65,139
II. Recurrent Costs												
GoC	8,933	8,837	8,484	8,296	8,240	42,790	1,273	1,259	1,209	1,182	1,174	6,095
IFAD	1,808	1,808	1,808	1,808	1,808	9,040	258	258	258	258	258	1,288
Beneficiaries	1,009	913	560	372	316	3,170	144	130	80	53	45	452
Total Recurrent Costs	11,750	11,558	10,852	10,476	10,364	55,000	1,674	1,646	1,546	1,492	1,476	7,835
Total Financing of Costs	3,39,784	4,09,089	3,17,095	91,643	56,663	12,14,274	48,402	58,275	45,170	13,055	8,072	1,72,974

DETAILED COST TABLES BY COMPONENTS (sub-components)

Table 1.1: Inclusive Rural Business Development

China
H2RDP Design mission
Table 1.0. Summary: Inclusive rural business

Detailed Costs																
Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						Disb. Acct.	Fin. Rule
	2021	2022	2023	2024	2025	Total			2021	2022	2023	2024	2025	Total		
I. Investment Costs																
A. Investment support	entity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	GRANT_DA IFAD (100%)
B. BP entities																
IFAD	entity	80	86	70	-	-	236	864,078	123,088	9,970	10,986	9,166	-	-	30,121	GRANT_DA IFAD (100%)
Govt of China	entity	80	86	70	-	-	236	645,985	92,021	7,454	8,213	6,852	-	-	22,519	GRANT_DA GOVT
Private sector	entity	80	86	70	-	-	236	584,367	83,243	6,743	7,430	6,199	-	-	20,371	GRANT_DA PRIVATE (100%)
Subtotal BP entities										24,167	26,628	22,216	-	-	73,011	
C. Business startup for women/youth	startup	104	117	96	-	-	317	117,073	16,677	1,756	2,025	1,703	-	-	5,484	GRANT_DA IFAD (80%), PRIVATE (20%)
Total										25,923	28,653	23,919	-	-	78,495	

Table-1.2: Rural Business Development Services

China
H2RDP Design mission
Table 2.0. Summary: Rural business development services

Detailed Costs

	Unit	Quantities					Total	Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Total	Disb. Acct.	Fin. Rule
		2021	2022	2023	2024	2025				2021	2022	2023	2024	2025			
I. Investment Costs																	
A. Agri-business development																	
1. Business incubation centres /a																	
Setting up	centre	20	30	-	-	-	50	48,760	6,946	141	216	-	-	-	357	GSI_DA	IFAD (100%)
Technical assistance to service centres	centre	20	30	-	-	-	50	314,402	44,787	907	1,394	-	-	-	2,301	GSI_DA	IFAD (100%)
Technical assistance to clients	centre	-	20	30	-	-	50	118,230	16,842	-	350	537	-	-	887	GSI_DA	IFAD (100%)
Review and support of business	centre	-	-	20	30	-	50	148,520	21,157	-	-	450	692	-	1,142	GSI_DA	IFAD (100%)
Subtotal Business incubation centres										1,048	1,960	988	692	-	4,687		
2. Youth/Women business capacity																	
Mentoring of startup candidates	centre	-	40	50	50	-	140	18,000	2,564	-	106	136	140	-	383	GSI_DA	IFAD (100%)
Subtotal Agri-business development										1,048	2,067	1,124	832	-	5,070		
B. Inclusive rural services																	
1. Climate smart services																	
Monitoring and early warning systems	centre	16	24	-	-	-	40	72,000	10,256	166	255	-	-	-	422	TRAINING_DA	IFAD (100%)
Capacity building and technical services	centre	16	24	-	-	-	40	18,000	2,564	42	64	-	-	-	105	TRAINING_DA	IFAD (100%)
Climate related insurance	centre	-	16	24	-	-	40	45,000	6,410	-	103	154	-	-	256	TRAINING_DA	GOVT
Subtotal Climate smart services										208	422	154	-	-	783		
2. Epidemic prevention and mitigation (COVID-19)																	
Developing guidelines	Lumpsum	10	-	-	-	-	10	27,000	3,846	39	-	-	-	-	39	TRAINING_DA	IFAD (100%)
Providing expert assessment and design of risk mitigation measures	centre	20	30	-	-	-	50	14,400	2,051	42	64	-	-	-	105	TRAINING_DA	IFAD (100%)
Subtotal Epidemic prevention and mitigation (COVID-19)										80	64	-	-	-	144		
3. Other production and rural services																	
Inputs	Lumpsum	10	10	10	10	11	51	200,117	28,507	289	296	303	311	350	1,549	GSI_DA	IFAD (100%)
Provision of collective services	Lumpsum	10	10	10	10	11	51	44,824	6,385	65	66	68	70	78	347	GSI_DA	IFAD (100%)
Subtotal Other production and rural services										353	362	371	380	429	1,896		
Subtotal Inclusive rural services										641	848	525	380	429	2,824		
Total Investment Costs										1,689	2,915	1,649	1,212	429	7,894		
II. Recurrent Costs																	
A. Staff salary																	
Staff salary /b	pers_year	20	20	20	20	20	100	60,400	8,604	172	172	172	172	172	860	SAA_DA	IFAD (100%)
B. Other operating costs																	
Rental expenditure	office year	10	10	10	10	10	50	60,000	8,547	85	85	85	85	85	427	OPC_DA	GOVT
Office operating costs	office year	10	10	10	10	10	50	60,000	8,547	85	85	85	85	85	427	OPC_DA	IFAD (100%)
Subtotal Other operating costs										171	171	171	171	171	855		
Total Recurrent Costs										343	343	343	343	343	1,715		
Total										2,032	3,258	1,992	1,555	772	9,609		

^a Refurbishing building, facilities, etc
^b 3 staff in each county centre

Table-1.3: Professional Farmers Training

China H2RDP Design mission Table 3.0. Summary: Professional farmer training																	
Detailed Costs																	
Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						Disb. Acct.	Fin. Rule	
	2021	2022	2023	2024	2025	Total			2021	2022	2023	2024	2025	Total			
I. Investment Costs																	
A. Professional farmer training																	
1. Number of trainees																	
# of incremental training (DLI_1)	Lumpsum	1,000	1,000	1,000	1,000	1,000	5,000	1,978	282	285	292	300	307	315	1,500	TRAINING_DA	IFAD (100%)
2. Proportion of women trainees																	
Incremental trainees (DLI_2)	persons	249	372	449	499	499	2,068	1,310	187	47	72	89	102	104	414	TRAINING_DA	IFAD (100%)
3. Average age of trainees DLI_3																	
Reduction in age of trainees (DLI_3)	pers_year	7,968	15,118	16,130	16,130	16,130	71,476	66	9	75	146	160	164	168	714	TRAINING_DA	IFAD (100%)
Total										408	511	549	573	587	2,628		

Table-2.1: Climate Resilient Infrastructure

China H2RDP Design mission Table 4.0. Summary: Climate resilient infrastructure																Other	
Detailed Costs	Unit	Quantities					Total	Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Total	Disb. Acct.	Fin. Rule
		2021	2022	2023	2024	2025				2021	2022	2023	2024	2025			
I. Investment Costs																	
A. Climate resilient infrastructure (IFAD)																	
1. Irrigation facilities																	
Irrigation canals /a	km	31	45	18	9	3	106	225,011	32,053	1,006	1,497	614	315	107	3,539	SCW_DA	IFAD (100%)
Pressure pipelines	km	29	33	23	8	4	97	136,984	19,513	573	668	477	170	87	1,976	SCW_DA	IFAD (100%)
Head control and systems	each	2,002	2,505	3,004	4	2	7,517	258	37	74	96	117	0	0	288	SCW_DA	IFAD (100%)
Culverts	each	12	10	11	5	2	40	10,350	1,474	18	15	17	8	3	62	SCW_DA	IFAD (100%)
Retaining dam	each	16	20	18	12	11	77	15,966	2,274	37	47	44	30	28	185	SCW_DA	IFAD (100%)
Aqueducts	each	7	9	9	3	2	30	22,500	3,205	23	30	31	10	7	101	SCW_DA	IFAD (100%)
Sluices	each	12	22	21	20	10	85	10,058	1,433	17	33	32	31	16	129	SCW_DA	IFAD (100%)
Bridges, canal crossing structures	each	1	3	3	-	-	7	57,856	8,242	8	26	26	-	-	60	SCW_DA	IFAD (100%)
Subtotal Irrigation facilities																	
										1,757	2,412	1,358	564	249	6,340		
2. Water supply facilities																	
Pumping stations	site	6	9	5	2	1	23	103,060	14,681	89	137	78	32	16	353	SCW_DA	IFAD (100%)
Water ponds	site	29	50	22	8	1	110	98,353	14,010	411	727	328	122	16	1,604	SCW_DA	IFAD (100%)
Water cellar	site	25	25	-	-	-	50	4,644	662	17	17	-	-	-	34	SCW_DA	IFAD (100%)
Water pools	site	122	105	73	5	1	306	38,938	5,547	685	604	431	30	6	1,757	SCW_DA	IFAD (100%)
Subtotal Water supply facilities																	
										1,202	1,486	837	184	38	3,748		
3. Drainage ditches																	
Drainage ditches	km	8.2	15.4	12.8	8.8	2.4	47.6	279,143	39,764	330	636	541	382	107	1,995	SCW_DA	IFAD (100%)
Subtotal Climate resilient infrastructure (I)																	
										3,289	4,533	2,737	1,130	394	12,083		
B. Climate resilient infrastructure (Taouy)																	
1. Irrigation facilities																	
Irrigation canals /b	km	2.8	5.6	6.5	2.8	0.9	18.6	450,806	64,217	182	373	444	196	65	1,260	SCW_DA	GOVT
Irrigation canals (Rucheng, GOC) /c	km	15	15	9.86	-	-	39.86	160,440	22,855	347	356	240	-	-	943	SCW_DA	GOVT
Pressure pipelines	km	0.5	0.9	1.1	0.5	-	3	15,600	2,222	1	2	3	1	-	7	SCW_DA	GOVT
Head control and systems	each	1	1	1	1	-	4	4,500	641	1	1	1	1	-	3	SCW_DA	GOVT
Culverts	each	14	29	34	14	6	97	1,800	256	4	8	9	4	2	26	SCW_DA	GOVT
Retaining dam	each	1	2	2	-	-	5	254,400	36,239	37	75	77	-	-	189	SCW_DA	GOVT
Sluices	each	8	17	20	8	3	56	546	78	1	1	2	1	0	5	SCW_DA	GOVT
Bridges, canal crossing structures	each	11	23	27	11	4	76	2,700	385	4	9	11	5	2	31	SCW_DA	GOVT
Subtotal Irrigation facilities																	
										576	825	786	207	68	2,463		
2. Drainage ditches																	
Drainage ditches, (Shimen county, GOC)	km	2	1.34	-	-	-	3.34	1,763,400	251,197	502	337	-	-	-	839	SCW_DA	GOVT
Subtotal Climate resilient infrastructure (B)																	
										1,079	1,162	786	207	68	3,302		
Total																	
										4,368	5,695	3,523	1,338	462	15,385		

Table-2.2: Rural Infrastructure

China H2RDP Design mission Table 5.0. Summary: Rural infrastructure																Other	
Detailed Costs																	
Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)						Disb. Acct.	Fin. Rule	
	2021	2022	2023	2024	2025	Total			2021	2022	2023	2024	2025	Total			
I. Investment Costs																	
A. Rural infrastructure																	
1. Rural roads																	
Village roads	km	55.22	64	39.46	23	12	193.68	441,963	62,958	3,520	4,182	2,643	1,579	844	12,768	CW_DA	GOVT
Earth Road	km	47	67.8	47.94	28.27	17	208.01	301,728	42,981	2,045	3,024	2,192	1,325	817	9,403	CW_DA	GOVT
Production Road	km	41.9	64.8	43.4	28.9	12.7	191.7	388,131	55,289	2,346	3,718	2,553	1,742	785	11,143	CW_DA	GOVT
Subtotal Rural roads										7,911	10,924	7,387	4,646	2,446	33,314		
2. Drinking water supply																	
Water pipelines	km	40.6	32	11	4	2	89.6	163,654	23,313	958	774	273	102	52	2,159	CW_DA	GOVT
Water source engineering	work	32	39	13	1	-	85	80,301	11,439	371	463	158	12	-	1,004	CW_DA	GOVT
Subtotal Drinking water supply										1,329	1,237	431	114	52	3,163		
3. Power supply system																	
Electricity cable lines	km	9	3	-	-	-	12	72,000	10,256	93	32	-	-	-	125	CW_DA	GOVT
Transformers	each	4	1	-	-	-	5	91,800	13,077	53	14	-	-	-	67	CW_DA	GOVT
Subtotal Power supply system										146	46	-	-	-	192		
4. Land development (preparation)																	
Land levelling	ha	243	397	397	120	10	1,167	32,077	4,569	1,124	1,883	1,930	598	51	5,586	CW_DA	GOVT
Land terracing	ha	44	94	93	43	10	284	37,511	5,343	238	521	529	251	60	1,598	CW_DA	GOVT
Subtotal Land development (preparation)										1,362	2,404	2,458	848	111	7,184		
5. Environmental improvements	lumpsum									1,838	2,913	2,327	1,493	1,144	9,716	CW_DA	GOVT
Total Investment Costs										12,586	17,524	12,604	7,102	3,753	53,569		
II. Recurrent Costs																	
A. Operations and maintenance																	
O&M groups	lumpsum	39	35	21	14	12	121	50,000	7,123	278	249	150	100	85	862	OPC_DA	BEN (50%)
Persons trained	per year	453	508	468	292	216	1,937	150	21	10	11	10	6	5	41	OPC_DA	BEN (50%)
Total Recurrent Costs										287	260	160	106	90	903		
Total										12,874	17,784	12,763	7,208	3,843	54,472		

Table-3.1: Project management, M&E, KM and Policy.. Investment costs

***Funds for Pro-WEIA surveys in M&E budget-**The project will conduct simplified Pro-WEAI surveys to monitor its performance on women’s empowerment against a specific logical framework target. The IFAD Empowerment indicator (simplified pro-WEAI) surveys budgets are included for baseline, mid-term and completion and the amount US \$ 85000 is allocated towards all baseline surveys.

China H2RDP Design mission Table 6. Summary: Project Management, M&E, KM and P Detailed Costs																	
Unit	Quantities					Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Disb. Acct.	Fin. Rule			
	2021	2022	2023	2024	2025			Total	2021	2022	2023	2024			2025	Total	
I. Investment Costs																	
A. PMO																	
1. PMO																	
a. Technical assistance																	
Office equipment	set	-	-	-	-	-	-	-	-	-	-	-	-	-	GSI_DA	GOVT	
Thematic specialists	lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71	GSI_DA	GOVT
RBL verification service	Lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71	GSI_DA	GOVT
Subtotal Technical assistance									28	28	28	28	28	142			
b. Training																	
Management workshop & training	lumpsum	1	1	1	1	1	5	340,000	48,433	48	48	48	48	48	242	TRAINING_DA	GOVT
Gender focus training	lumpsum	1	-	-	-	-	1	150,000	21,368	21	-	-	-	-	21	TRAINING_DA	GOVT
Monitoring & evaluation	lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71	TRAINING_DA	GOVT
Agri-business related training	lumpsum	1	1	1	1	1	5	80,000	11,396	11	11	11	11	11	57	TRAINING_DA	GOVT
Subtotal Training									95	74	74	74	74	392			
c. Knowledge management																	
National study tours	lumpsum	1	1	1	1	1	5	156,000	22,222	22	22	22	22	22	111	TRAINING_DA	GOVT
Knowledge documents & sharing	lumpsum	1	1	1	1	1	5	240,000	34,188	34	34	34	34	34	171	TRAINING_DA	GOVT
Subtotal Knowledge management									56	56	56	56	56	282			
d. WF capacity building																	
WF capacity building	lumpsum	1	1	1	1	-	4	67,500	9,615	10	10	10	10	-	38	TRAINING_DA	GOVT
Knowledge document & sharing	lumpsum	1	1	1	1	1	5	110,000	15,670	16	16	16	16	16	78	TRAINING_DA	GOVT
Subtotal WF capacity building									25	25	25	25	16	117			
e. Monitoring and evaluation																	
Baseline survey	lumpsum	1	-	-	-	1	3	200,000	28,490	28	-	28	-	28	85	TRAINING_DA	GOVT
MIS set up	lumpsum	1	-	-	-	-	1	800,000	113,960	114	-	-	-	-	114	TRAINING_DA	GOVT
Policy activities	lumpsum	-	1	1	1	1	4	250,000	35,613	-	36	36	36	36	142	TRAINING_DA	GOVT
Subtotal Monitoring and evaluation									142	36	64	36	64	342			
Subtotal PMO									348	220	248	220	239	1,275			
B. Prefecture office (Xiangxi)																	
1. Prefecture PMO																	
a. Equipment and materials																	
Equipment and materials	prefecture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EQUIP_DA	GOVT
b. Workshops and training																	
Management workshop & training	lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71	TRAINING_DA	GOVT
Gender focus training	lumpsum	1	-	-	-	-	1	100,000	14,245	14	-	-	-	-	14	TRAINING_DA	GOVT
Monitoring & evaluation	lumpsum	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71	TRAINING_DA	GOVT
Agri-business-related training	lumpsum	1	1	1	1	1	5	60,000	8,547	9	9	9	9	9	43	TRAINING_DA	GOVT
Subtotal Workshops and training									51	37	37	37	37	199			
c. Knowledge management events																	
National study tours	prefecture	1	1	1	1	1	5	50,000	7,123	7	7	7	7	7	36	TRAINING_DA	GOVT
Knowledge documents & sharing	prefecture	1	1	1	1	1	5	50,000	7,123	7	7	7	7	7	36	TRAINING_DA	GOVT
Subtotal Knowledge management events									14	14	14	14	14	71			
d. WF Capacity building																	
WF capacity building	lumpsum	1	1	1	-	-	3	-	-	-	-	-	-	-	-	TRAINING_DA	GOVT
Knowledge documents & sharing	lumpsum	1	1	1	1	1	5	-	-	-	-	-	-	-	-	TRAINING_DA	GOVT
Subtotal WF Capacity building									-	-	-	-	-	-			
e. Monitoring and evaluation																	
Policy studies	lumpsum	-	1	1	1	1	4	62,500	8,903	-	9	9	9	9	36	TRAINING_DA	GOVT
Subtotal Prefecture PMO									66	60	60	60	60	306			

Table-3.1: Project management, M&E, KM and Policy.. Investment costs

China H2RDP Design mission Table 6. Summary: Project Management, M&E, KM and P																	
Detailed Costs																	
Unit	Quantities						Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Total	Disb. Acct.	Fin. Rule	
	2021	2022	2023	2024	2025	Total			2021	2022	2023	2024	2025				
I. Investment Costs																	
C. County PMOs																	
1. Office equipment																	
Office equipment /a	lumpsum	10	-	-	-	-	10	239,000	34,046	340	-	-	-	-	340	EQUIP_DA	IFAD (100%)
2. Staff training																	
a. National training																	
Project management training	pers_days	50	50	50	50	50	250	1,000	142	7	7	7	7	7	36	TRAINING_DA	IFAD (100%)
FM & procurement training	training	40	40	40	40	40	200	1,000	142	6	6	6	6	6	28	TRAINING_DA	IFAD (100%)
Gender related training	pers_days	50	-	50	-	50	150	1,000	142	7	-	7	-	7	21	TRAINING_DA	IFAD (100%)
Environmental safe guard training	pers_days	50	-	50	-	50	150	1,000	142	7	-	7	-	7	21	TRAINING_DA	IFAD (100%)
Technical training	pers_days	100	100	100	100	100	500	1,000	142	14	14	14	14	14	71	TRAINING_DA	IFAD (100%)
Subtotal National training										41	27	41	27	41	178		
b. workshops and meetings																	
Workshops & meetings	event	20	20	20	20	20	100	5,000	712	14	14	14	14	14	71	TRAINING_DA	IFAD (100%)
c. Project study tours																	
Study tours within the Province	persons	-	100	150	150	100	500	1,000	142	-	14	21	21	14	71	TRAINING_DA	IFAD (100%)
Outside the Province	persons	-	50	50	50	50	200	7,000	997	-	50	50	50	50	199	TRAINING_DA	IFAD (100%)
Subtotal Project study tours										-	64	71	71	64	271		
Subtotal Staff training										56	105	127	113	120	520		
3. TA and short-term staff																	
TA consultants	lumpsum	10	10	10	10	10	50	40,000	5,698	57	57	57	57	57	285	GSI_DA	IFAD (100%)
Short-term staff	pers_month	20	20	20	20	20	100	7,100	1,011	20	20	20	20	20	101	GSI_DA	IFAD (100%)
Subtotal TA and short-term staff										77	77	77	77	77	386		
4. M&E and knowledge management																	
a. Monitoring & evaluation	lumpsum	10	10	10	10	10	50	70,000	9,972	100	100	100	100	100	499	TRAINING_DA	IFAD (100%)
b. Knowledge maangement	lumpsum	10	10	10	10	10	50	43,400	6,182	62	62	62	62	62	309	TRAINING_DA	IFAD (100%)
Subtotal M&E and knowledge management										162	162	162	162	162	808		
5. Planning and design																	
Planning and design	lumpsum	10	10	10	10	10	50	496,000	70,655	707	707	707	707	707	3,533	TRAINING_DA	GOVT
Subtotal County PMOs										1,341	1,051	1,072	1,058	1,065	5,587		
Total Investment Costs										1,755	1,331	1,381	1,338	1,364	7,168		

Table-3.1: Project management, M&E, KM and Policy.. Recurrent costs

China H2RDP Design mission Table 6. Summary: Project Management, M&E, KM and P																	
Detailed Costs																	
	Unit	Quantities					Total	Unit Cost (CNY)	Unit Cost (US\$)	Totals Including Contingencies (US\$ '000)					Total	Disb. Acct.	Fin. Rule
		2021	2022	2023	2024	2025				2021	2022	2023	2024	2025			
II. Recurrent Costs																	
A. PMO																	
staff salaries /b	lumpsum	1	1	1	1	1	5	400,000	56,980	57	57	57	57	57	285	SAA_DA	GOVT
Travel costs	year	1	1	1	1	1	5	200,000	28,490	28	28	28	28	28	142	OPC_DA	GOVT
Office operating costs	year	1	1	1	1	1	5	200,000	28,490	28	28	28	28	28	142	OPC_DA	GOVT
Vehicle renting	year	1	1	1	1	1	5	100,000	14,245	14	14	14	14	14	71	OPC_DA	GOVT
Subtotal PMO										128	128	128	128	128	641		
B. Prefecture PMO																	
1. Travel costs	staff year	1	1	1	1	1	5	50,000	7,123	7	7	7	7	7	36	SAA_DA	GOVT
2. Office Operating costs	year	1	1	1	1	1	5	10,000	1,425	1	1	1	1	1	7	OPC_DA	GOVT
3. Vehicle hiring costs	year	1	1	1	1	1	5	50,000	7,123	7	7	7	7	7	36	OAM_DA	GOVT
Subtotal Prefecture PMO										16	16	16	16	16	78		
C. Counties																	
1. Staff salary (3 staff in each county)																	
Staff salary	per annum	30	30	30	30	30	150	66,666	9,497	285	285	285	285	285	1,424	SAA_DA	GOVT
2. Other operating costs																	
Vehicle hiring charges	per year	10	10	10	10	10	50	96,000	13,675	137	137	137	137	137	684	OPC_DA	GOVT
Office operating costs /c	per year	10	10	10	10	10	50	335,400	47,778	478	478	478	478	478	2,389	OPC_DA	GOVT
Subtotal Other operating costs										615	615	615	615	615	3,073		
Subtotal Counties										899	899	899	899	899	4,497		
Total Recurrent Costs										1,043	1,043	1,043	1,043	1,043	5,217		
Total										2,798	2,374	2,424	2,381	2,407	12,385		

\a such as laptops, desk-tops, projector, printers, photo-copiers, digital camera, etc
 \b 5 staff

\c Including electricity, communication, travel, water, stationary, allowances, etc

Chapter 8: Financial Management

263. H2RDP will benefit from the previous IFAD funded projects in Hunan, namely the Wulin Mountains MADP and HARIIP, both closed on 2007 and 2018 respectively. Based on these previous experience to avoid delays at start-up the project will ensure that: (a) qualified finance staff be appointed at each PMOs; (b) PIM and FMM be properly prepared, translated and distributed to all PMOs; (c) an accounting software in compliance with international standards be procured (d) retroactive financing will be used to speed up the initial activities (e) continued capacity building for staff at the implementing agencies be conducted at an early phase.

Organization and staffing

264. The PMOs will be staffed with experienced and qualified officers in project management, financial management and procurement. They will also be assisted by officers from the technical line bureaus at each corresponding level. The PPMO and CPMOs will be in charge of the day-to-day management of project activities, overseeing the implementation and supervising the financial progress.
265. The PPMO organization structure will be composed of a Project Director who has the overall responsibility for the project, and a Finance Manager who has financial responsibility. An Accountant and a Cashier will also staff the finance team of the PPMO. The technical officers in the PPMO will have review and pre-approval functions, similarly at the county PMOs.
266. The finance team of each CPMO will be composed of one Accountant with overall financial responsibility at the county level.

Budgeting

267. China has undertaken extensive reforms to its budgeting system over the past ten years. These have encompassed the entire budgeting cycle: formulation, approval, implementation and audit. Under its budgeting system, provincial, and local government, all activities of the government are predetermined and are set out in plans and programs.
268. The Hunan PPMO, after consultations with project stakeholders, shall prepare its annual budget, linking all the planned activities to the disbursement categories of the Schedule II of the Financing Agreement. This exercise will take place in advance of the preparation of the national budget to ensure that the required Government funds are timely allocated. All financing sources of the project should be clearly stated in a consolidated budget.
269. Counterpart funding will be allocated for the project by province, counties and districts. The government will ensure that counterpart funds are contained in the domestic fiscal allocations for each county and that they are released for the project on time. The counterpart funding will be maintained in the Treasury Accounts of the counties and will be used to pre-finance eligible expenditures of the project as well.

Internal controls

270. The internal control arrangements for H2RDP should consider: (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) random independent reviews; (e) clear procedures for timely monitoring and financial reporting from the Implementing Agencies of the project. The Provincial PMO shall define the appropriate internal controls in the Financial Management Manual, as part of the PIM.

In the case of H2RDP it is expected that for each payment sufficient reviews and checks and oversight will be carried out by the Internal Audit and Finance Bureaus.

Central level government agencies are active in identifying counties to be randomly inspected and reviewed. Audit findings are followed up during subsequent reviews, and disciplinary actions taken in more serious cases. Inspection/Internal audit work however is primarily of a compliance nature.

Accounting and Financial Reporting

271. The project will procure a web-based integrated software to support the core management functions at the central and county levels, such as business plan development, financial management and project monitoring and evaluation. The financial management module of the integrated software will comply with the IPSAS accrual basis of accounting and will have the functionality to report by disbursement category, project component and financing sources at each level of implementation.
272. The Hunan PPMO will be responsible for the consolidation of the financial information produced in each county. The project will maintain separate accounts or ledgers at every level of implementation and for each financier to be able to generate independent financial information.

External Audit

273. H2RDP's annual accounts will be audited by the Hunan Provincial Audit Office (HPAO) on an annual basis in accordance with International Standards on Auditing (ISA) and following the IFAD Handbook for Financial Reporting and Auditing. The audited project financial statements together with the auditor's opinion (following ISA 705) will be submitted to IFAD in English within six months from the end of the fiscal year. The HPAO is constituted as an independent body under the National Audit Office (NAO). The NAO delegates to the Provincial Audit Offices (PAOs) the external audits of provincial donor-funded projects in China. IFAD has previous experience with other PAOs, and these audit arrangements are deemed acceptable to IFAD.
274. The objective of H2RDP's annual audit is to enable the auditor to express an opinion on whether H2RDP's financial statements present fairly, in all material respects, its financial

position at the end of the fiscal year, and if the results of its operations and cash flow are in conformity with the accounting standards applied by H2RDP. Compliance with financial reporting, auditing requirements and performance of the auditor will be monitored regularly and during supervision missions.

275. IFAD promotes public disclosure of projects financial information to enhance transparency and accountability. IFAD will disclose H2RDP's audit reports, as appropriate, in line with the IFAD's disclosure policy. Management Letters issued by auditors are not subject to public disclosure by IFAD.

Disbursement

276. H2RDP's withdrawal and utilization of loan proceeds are governed by the IFAD's Loan Disbursement Handbook (LDH) and the Financing Agreement between IFAD and the Government of China. Applicable procedures for disbursement, financial reporting and maintenance of appropriate project records will be described in detail in the Letter to the Borrower subsequently after the signature of the Financing Agreement.
277. Once the Financing Agreement of H2RDP enters into force, the Ministry of Finance will on-lend the funding to the Hunan Provincial Department of Finance (HPDoF). At the same time – under the same terms and financing conditions - the HPDOF will on-lend the funding to the County Finance Bureaus.
278. According to the new Budget Law and the Decree 85 issued by MoF, IFAD loan is required to be included in government budgeting system. However, IFAD funds will be managed by the government treasury. The County PMOs are responsible for preparing the project annual plan and submitting to PPMO for consolidation. Since the required counterpart funds will be fully raised by county government, the CPMOs will be responsible for ensuring that the County Project Leading Group has the required counterpart funds committed in county government's annual budget.
279. An online guided overview of the practices and procedures of IFAD is available for project staff. Project staff is encouraged to avail this training to ensure an efficient disbursement and an appropriate fiduciary control.
280. Three standard disbursement procedures are available for H2RDP:
- a. Advance withdrawal
 - b. Direct payment
 - c. Reimbursement

Advance withdrawal

281. This disbursement procedure is used to advance funds to a bank account as designated by the borrower. IFAD will place a ceiling on the amount to be advanced, which will be sufficient to cover the average projected eligible expenditures of H2RDP for a period of six months.

The ceiling amount will also depend on the level of expenditure reported, and the projections established on the AWPBs. IFAD will ascertain and certify clearance of the figure to be advanced, which may vary during the implementation of the project.

The advance withdrawal will be the principal method to be used for the disbursement of H2RDP. The main conditions precedent to withdrawal the initial advance are: (i) evidence that the DA has been opened, and (ii) delegation of authority of the persons who will sign the withdrawal applications on behalf of the borrower. H2RDP will use the IFAD Client Portal (ICP) for the submission of withdrawal applications.

Direct payments

282. This disbursement procedure is used for eligible project expenditures to be paid directly by IFAD as per request of the PPMO. This procedure is generally suitable for payment of large civil works, consultant fees (when these are of substantial magnitude), importation of goods for which a letter of credit is not practical, and when exchange control regulations are present in the country. The minimum value threshold for direct payments is specified in the LTB.

Reimbursement

283. This disbursement procedure will be applicable when eligible expenditures have been pre-financed by the project for suppliers of goods, works, consulting or other services that have been incurred by the project from its own funds.

Flow of Funds

284. The Hunan Provincial Department of Finance (HPDoF) will open and maintain a Designated Account (DA) for the exclusive use of the loan proceeds of H2RDP. The HPDOF will be directly responsible for the management, maintenance and reconciliation of the DA. The DA will be administered following imprest arrangements, in which an initial amount of the loan is advanced and then replenished periodically based on justified expenditures. The advances from the Financing will be segregated from other funds of the Project.
285. The counties PMOs will prepare execution reports that will be reviewed by its corresponding County Finance Bureau before submission to the PPMO for additional review and consolidation. The HPDoF will provide final approval and transfer funds to the County Finance Bureaus (except for counties in Xiang Prefecture, where funds will flow through the prefecture Bureau of Finance). Then the finance bureaus at the request

of the CPMOs will transfer funds to the Implementing Agencies (AI) or pay Service Providers. The Prefecture PMO at Xiangxi will be established solely to provide oversight to project implementation in its respective counties.

Detail Procedural Protocols of FM (Main Contents Chapter 8)

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1.2 Organizational Framework

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Annex II: Sample Annual Work Plan and Budget

Annex III: Sample chart of account

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1.0 Introduction

286. The following manual outlines the financial procedures to be followed by the Project Management Offices (PMOs) during the following stages of the project cycle: i) preparation and planning, ii) implementation and iii) completion of the project. The manual aims to describe in detail the necessary steps to be undertaken by the relevant project staff and the Finance Manager (FM) (interchangeably identified as the Finance Controller - FC) in particular, when undertaking actions related to a) planning and budgeting, b) accounting, c) records management, d) internal controls, e) flow of funds, f) withdrawal of financing proceeds, g) processing of payments, h) financial reporting, i) fixed asset management, j) audit arrangements, k) supervision by IFAD and l) project completion and loan closure.
287. This manual is to be considered a living document and it is to be reviewed and updated at least once a year. It is to be read together with the Project Implementation Manual, the Procurement Manual, and the HR-manual. It is also important to note this manual makes references to the following IFAD key documents: Financing Agreement, IFAD General Conditions, Letter to the Borrower, IFAD Handbook for Financial Reporting and Auditing of IFAD- Financed Projects as well as the Disbursement Handbook. Therefore, it is fundamental that the project staff, especially the PD and the FM master these documents before the implementation of the project begins. The generic IFAD documents listed above are available at <http://www.ifad.org/pub/basic/index.htm>.

1.1 Project Overview

Project name: **Hunan Rural Revitalization Demonstration Project (H2RDP)**

Project loan number: xxxxxx

Effective date: xxxxxx

Completion date: xxxxxx

Closing date: xxxxxx

Project objectives: (refer to Chapter 2 (2.1))

Project Area and Selection Criteria: (refer to Chapter 2 (2.2))

Project target group: (refer to Chapter 2 (2.3))

Project beneficiaries: (refer to Chapter 2 (2.3))

Project components (refer to Chapter 3)

Project costs: The Borrower and IFAD have agreed within the Financing agreement (FA) to allocate the financing to categories of eligible expenditures shown in the Schedule 2 of the FA. The schedule 2 also specifies the percentages of such eligible expenditures to be financed by the Financing: 100% net of tax (this will be updated after the loan negotiations)

Category	IFAD loan	Total	Eligible expenditures (%) net of Tax
I. Works	xxxxxxx	xxxxxxx	100%
II. Consultancies /a	xxxxxxx	xxxxxxx	100%
III. Goods, Services and Inputs		xxxxxxx	100%
IV. Grants and Subsidies /b	xxxxxxx	xxxxxxx	100%
V. Operating Costs	xxxxxxx	xxxxxxx	100%
VI. Training	xxxxxxx	xxxxxxx	100%
VII. Results Based Lending		xxxxxxx	
Total	xxxxxxx	xxxxxxx	

(Table 1: Schedule 2 of the financing agreement - eligible expenditures by expenditure

category)

288. In addition to IFAD financing the Project will also receive counterpart financing from the Government, equivalent to approximately USD xxxx million. The counterpart financing will include xxxxx million in the form taxes and duties and USD xxxxx million in cash from the Government's budget. The project beneficiaries will also contribute approximately USD xx million to the project

289. **1.2 Organizational Framework**

290. **(a) Lead implementing Agency:** The Provincial Department of Agriculture and Rural Affairs (DARA) has been appointed as lead implementing agency. Specifically, the Hunan Agricultural Foreign Economic Cooperation Center within DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). Additional support will be mobilized from the Office of Rural Revitalization, Divisions of Cooperative Economy and other divisions of DARA whenever needed. The PPMO will not be using IFAD loan to carry out its functions. It will mobilize adequate budgetary resources from the government budget to carry out its overall management responsibilities.

(b) Prefecture and County Project Management Offices: Major implementation responsibilities of the project lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs, and adequately staffed - including through the acquisition of capacity and services from the market. Relevant technical bureaus in the counties (such as water conservancy, meteorological, transportation bureaus, etc.) will be mobilized to support the project implementation in the related activities of the project as per need. The Women Federation (WF) and Youth League (YL) in the counties will be also be assigned responsibilities in undertaking women and youth related activities designed for the project. The Chairperson of county Women Federation will be assigned the role of deputy project director at the county CPMO, with a specific role in overseeing the gender related aspects and activities of the project, and facilitating gender transformation in the project context. Prefecture PMOs at Xiangxi and Shaoyang will be established to provide oversight to project implementation in their respective counties. Similarly as the PPMO, the Prefecture PMO will secure required resources from the government to discharge its supervisory duties.

(c) Department/Bureaus of Finance: The Department/Bureau of Finance at Provincial/County level and at Xiangxi Prefecture and Shaoyang City will be responsible for administering programme resources, including the IFAD loan and counterpart funds.

(d) Implementing Support Units: Implementing Support Units will be established in the project townships to facilitate project implementation, targeting and related monitoring activities.

(e) Village Implementation Groups: (VIGs) will be established in the project supported villages to mobilize participation of farmers in the project such as in the consultative process of developing business partnership with agro-entities; oversee public rural infrastructure construction and maintenance; promote project prioritization to women and youth, etc.

The VIGs' major responsibilities include: (i) a regular participatory perceived well-being ranking of households within the village; (ii) identifying project modules and activities prioritized by eligible groups through participatory approaches, and reporting to the PMOs for the development of AWPBs; (iii) organizing the poor and vulnerable households to participate in project activities; (iv) assisting PMOs monitor project implementation and collecting M&E data as required; and (v) organising the operation and maintenance of community infrastructure built by the project.

(f) Provincial Coordination Committee: A coordinating committee comprising at least the Provincial Department of Finance (DOF), the Provincial Department of Agriculture and Rural Affairs (DARA), the Provincial Development and Reform Commission (PDRC), and the Provincial Office of Poverty Alleviation is foreseen to provide overall guidance and coordination of the project implementation. The Committee can be mobilized as per need.

(g) Project Leading Group: At county level, a Project Leading Group will be established to be chaired by the executive county governor, comprising at least the County Bureaux of Finance (BOF), Agriculture and Rural Affairs (CARA), and Poverty Alleviation Office, Women Federation etc. The Project Leading Group will provide overall guidance and coordination of the project implementation.

(h) Monitoring and Information System: A management information system (MIS) which will be specifically developed for the project, and that will integrate information regarding project management, financial management and physical progress, allowing real-time monitoring, evaluation and reporting, will be established to support the core project management functions at the provincial and county levels.

The project will (i) establish a control framework integrating periodic internal audits, independent external audits, and social safeguards to be adopted based on IFAD policies; (ii) adopt a good governance and mutual accountability framework to strengthen accountability and transparency in line with international best practices. (iii) outline the project specific financial management procedures and disbursement requirements in the PIM. (iv) establish a Management Information System (MIS) to support the core project management functions

(i) Independent third-party Verification Agency: An independent third-party verification agency will be contracted by the project to verify that the disbursement-linked indicator target set for the activity that would pilot the program result based lending approach (A.3. - Improving professional farmer training program) (i.e. increased percentage of women among people successfully trained under professional farmer training program with three verifiable indicators i.e DLI-1, incremental number of farmers completing the new professional farmer development training program; DLI-2, Incremental number of women completing the new professional farmer development training program; and DLI-3, Reduced age of the trainees completing the new professional farmer development training program). Confirmation that the disbursement-linked indicators (DLI) target has been achieved would be through a letter of confirmation to IFAD.

(j) Verification protocol: The achievement of the DLI_1, DLI_2 and DLI_3 as defined above will be recorded semi-annually by the Hunan Provincial Project Management Office (PPMO) based on reports by the project county PMOs. The PPMO will report the data to a

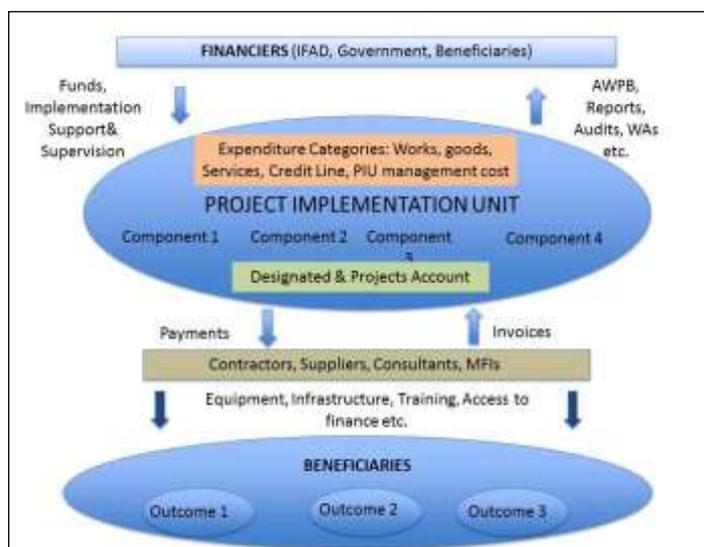
third-party Verification Agency (VA) for verification. The verification review will be done against Program Guidelines approved by Hunan [specific document yet to be identified]. It will require the review of relevant training documents from randomly selected 2 counties, which will be repeated for each disbursement period for new set of counties. In each randomly selected county, the verification will then randomly select 20 percent of the reported trainees having successfully completed the New Professional Farmer Development training program. For each randomly selected trainees a survey will also collect household information on the following variables: gender of the head of the household, poverty status, training content, method and organization of training, process, result and usefulness of accreditation/certificate, satisfaction with the services provided, frequency and relevance of continuous support, management of the whole program. However, only the evidence on the confirmation of the person's completion of the New Professional Farmer Development Program, the gender and the age will be used to verify DLI disbursement values. The rest of the information collected from beneficiary surveys will be used for the purposes of tracking the implementation progress of the program, including the Log-Frame indicators, which will be monitored through routine supervision missions. Verification that a DLI target has been achieved would be through a letter of confirmation to the IFAD.

(k) IFAD Disbursement: IFAD disbursement will be triggered by a letter of confirmation to be forwarded to IFAD on a semi-annual basis and supported by the corresponding list of trainees certified by the VA

1.3 Project Management Office

291. The overall responsibility for the implementation of the project will be with the Department of Agriculture and Rural Affairs at the Provincial (DARA), Prefecture (PARA) and County (CARA) levels. DARA/CARA will coordinate with other line departments/offices such as Finance, Development and Reform Commission, Water, Forestry, Roads, Women Federation, Ethnic Minority, Youth etc. to provide support and inputs for the project.
292. Specifically, the Hunan Agricultural Foreign Economic Cooperation Center within DARA would take lead responsibility for project design, management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). Additional support will be mobilized from the Office of Rural Revitalization, Divisions of Cooperative Economy and other divisions of DARA whenever needed. The PPMO will not be using IFAD loan to carry out its functions.
293. PMOs are staffed with officers who need to have experience in project management, financial management, procurement, and monitoring and evaluation. They will also be assisted by officers from the technical line bureaus of Water Resources, Agriculture, Forestry, and Finance at the corresponding level. PPMOs and CPMOs will be in charge of day to day management of project activities, overseeing project designs, implementing and supervising project activities, arranging for counterpart-funding and local labor contribution, preparing annual work plans, financial plans, procurement plans, monitoring and reporting on project progress, outputs, and outcomes.

294. To implement the project and its components, the PMO will receive funds from the financiers (IFAD, the government and beneficiaries), which will be channelled through designated and project accounts to cover project expenditures, in accordance to the Annual Work Plan and Budget (AWPB) and the expenditure categories as per the schedule 2 of the FA.

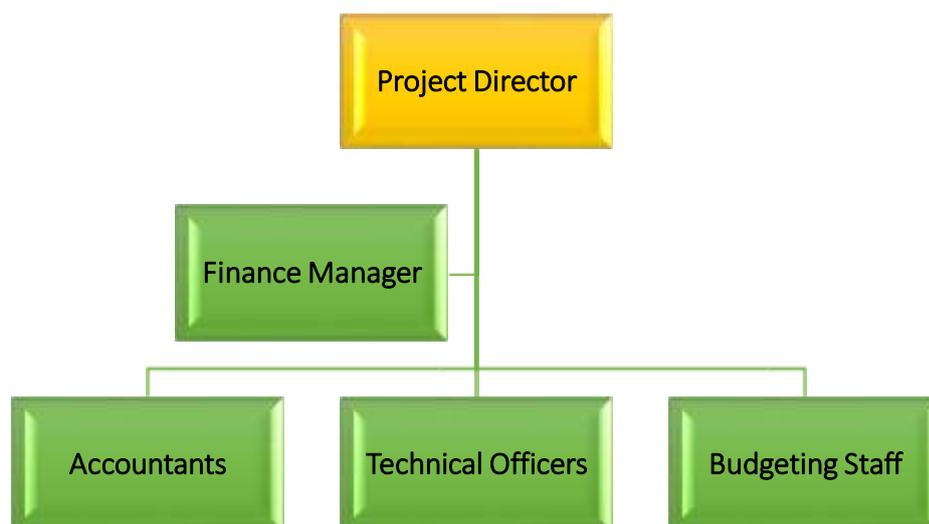


(Chart 2: The Financial operations environment of the PMO)

295. PMO and the CPMOs will assign financial staff and to support the Financial Division for the financial management of the project. The financial division at each level is composed of three or more professional staff (Finance Manager, released on a full-time basis, to be assisted by an Accountant and Accounts Assistants).
296. The PPMO organization structure is composed of the director who has overall responsibility and a Finance Manager who has financial responsibility overseeing an accountant and a cashier. The technical officers in the PMOs will have review and pre-approval functions, similarly in the counties PMOs.
297. Financial Manager (accountant in professional title) is responsible for the project financial management. The manager will be assigned who has accumulated rich experiences in managing projects of international cooperation in the years implementation of the World Bank and ADB projects.

Budgeting staff are responsible for the allocation of project plan funds. procurement personnel, accountants are responsible for calculating and reviewing the fund inflow and disbursement

Financial accountants are personnel of state organisations, all of whom have been selected and recruited through examinations.



(Chart 3: Organogram of the staff involved in financial operations)

298. In order to ensure that the financing proceeds are used for the intended purpose and as efficiently as possible, it is essential that the FM sets up and maintains adequate financial management arrangements in each stage of the project cycle: i) preparation and planning, ii) implementation as well as iii) completion and closing, as illustrated in the chart below.

Preparation and Planning	Implementation	Completion and Closing of the Financing
a) Setting up and proper staffing of the PIU b) Setting up accounting and systems and financial management procedures c) Annual work plan and budget d) Opening of a designated and project accounts e) Training of staff (IFAD procedures etc.)	a) Record keeping and accounting b) Withdrawal applications c) Bank reconciliations d) Periodic reporting, comparison with actual expenses and forecasts e) Auditing arrangements f) Amendments and budget reconciliations g) IFAD supervision missions	a) Expenditures (eligible) claimed by the borrower by closing date b) Final inventory (disposal/handover) c) Closure of bank accounts and refund balances e) Final audit and financial reporting f) Budget wrap up

(Chart 4: Financial management arrangements in the different stages of the project cycle)

 Sample Job descriptions for the PD, Financial Manager, Deputy FM, Programme Assistant (Finance), Documentation Officer are provided in annex I. A sample staff development plan is provided in annex II: Table 6 of the AWPB.

1.4 Anticorruption policy

299. The management of the project funds shall be sufficiently rigorous to safeguard against Fraud and Corruption. Fraud and corruption include, but are not limited to:
- corrupt practice - offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party
 - fraudulent practice - 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
 - collusive practice - an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party
 - coercive practice - 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
300. IFAD applies a zero-tolerance policy towards fraudulent, corrupt, collusive or coercive actions in projects financed through its loans and grants. 'Zero tolerance' means that IFAD will pursue all allegations falling under the scope of this policy and that appropriate sanctions will be applied where the allegations are substantiated. IFAD takes all possible actions to protect individuals who submit allegations of fraudulent or corrupt practices in its activities from reprisal. The IFAD anticorruption policy is available on IFAD website at www.ifad.org/governance/anticorruption/index.htm). The IFAD website also provides instructions on how to report any alleged wrongdoing to the Office of Audit and Oversight (<http://www.ifad.org/governance/anticorruption/how.htm>).

It is the PD's and the Financial Manager's responsibility to make sure that all staff including the financial department are aware of IFADs and the lead project agency's anticorruption policy and whistle blowing procedures.

2.0 Budgeting and Planning

301. China has undertaken extensive reforms to its budgeting system over the past 10 years. These have encompassed the entire budgeting cycle: formulation, approval, implementation and audit. The early challenge was fundamentally to create the institutional infrastructure for a modern budget process where none had previously existed. Under its budgeting system, provincial, and local government. All activities of the government are predetermined and are set out in plans and programs. The annual estimates of expenditure detail the financial commitment of the government for the next year's program of activities.
302. The AWPB is expected to contain several key elements such as:
- i) Introduction and brief background;
 - ii) Strategic focus and outputs;

- iii) Major risks and mitigation actions;
- iv) Budget and Financing plan;
- v) Procurement plan;
- vi) Training and technical assistance schedule and,
- vii) PMO staff development plan

303. The LPA should make adequate annual budgetary provisions for IFAD funds and Counterpart funds in the National Budget, based on the AWPB of the Project.

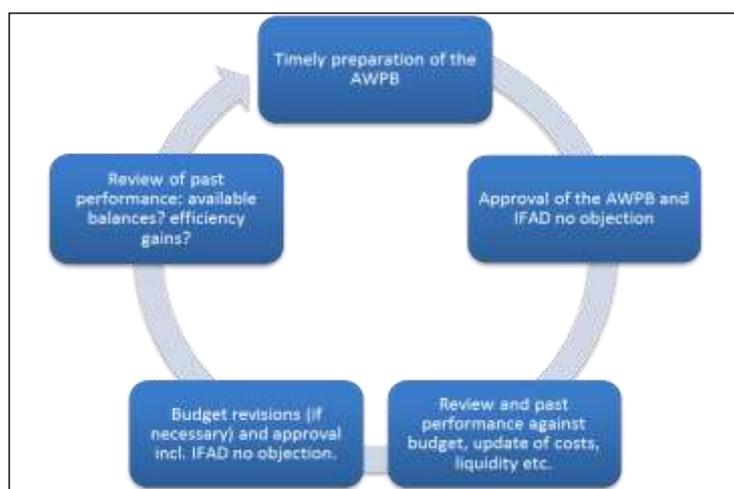
Counterpart funding will consist of allocations made by the project province and counties/districts. Government will ensure that counterpart funds are contained in the domestic fiscal allocations for the counties, and that they are released for the project on time. The counterpart funding maintain in the Treasury Accounts of the counties will be used to pre-finance the project expenditures as well.

Budget allocations will be made to enable the function of the provincial and county PMOs, to cover investment and recurrent expenses, office and training equipment, capacity building, M&E, knowledge management, and agribusiness facilitation services. Modest project support will also be reserved for function at township where existing government staff and facilities will be used. Recurrent costs for all PMOs will be ensured by government counterpart funding, which will cover staff salaries, travel costs, administrative costs, and operation and maintenance of vehicles etc..

304. The budget and financing plan can be described as a detailed statement of the expected resources available to the project and the planned use of those resources for the upcoming project year. The AWPB and especially the budget and financing plan is an important tool for managing the financial performance of the project and to ensure sufficient cash flow.

The budgeting and planning process comprises of the following parts:

- Preparation of annual, semi-annual, quarterly and even monthly financial plans including procurement, receipts, expenditures and cash flows.
- Review of past performance against budgets and the procurement plan, to promote an understanding of the project cost base;
- Identification of potential efficiency savings; and
- Review of the main expenditure headings in light of the project implementation plan, procurement plan, and expected variations in cost e.g. pay increases, inflation and other anticipated changes.



(Chart 5: The project budget cycle)

2.1 Development of the AWPB

305. During the last quarter of the previous year - before the beginning of each fiscal year for the project, The PPMO, after consultations with project stakeholders, shall prepare its annual budget, linking all the planned activities to the cost categories outlined in Schedule II of the Financing Agreement; this exercise will take place in advance of the preparation of the national budget, to ensure that the required Government funds will be allocated and available on time. All financing contributions should be clearly stated in the budget to be submitted to internal for approval and to IFAD for non –objection.
306. The budget and financing plan should be prepared and presented on a quarterly basis. The data on the number of activities to be implemented in the coming year and the estimates of the total funds needed to finance them should be presented by component and sub-component, by expenditure category as well as by financier. The estimates should be based on the project’s (up to date) cost tables. In addition to the financial information described above, the budget should also take into account the physical outreach of the project (number of farmer’s to be trained etc.).
307. When preparing the AWPB the following aspects should be taken into consideration:
- Consistency with other financial reports: It is practical to prepare the budget and financing plan in the same format as the periodic (financial) progress reports and the project financial statements of the project.
 - Contingency provisions (physical and price) and allocation of funds from the unallocated expenditure category.
 - Post implementation activities e.g. arrangements for after life of project, disposal of project assets (computers, vehicles etc.), future repair and maintenance.
 - Availability for funds and arrangements for all audits.
308. After preparing the draft AWPB, the FM will send it to the PD and Steering Committee/LPA for review and clearance/approval before sending it to IFAD for no objection. In accordance with the FA, a draft AWPB has to be submitted to IFAD no later

than 60 days before the beginning of the relevant fiscal year of the project. If required the /LPA could propose adjustments in the AWPB during the relevant project year, which would become effective after IFAD' approval.

309. The AWPB must be accompanied by a procurement plan prepared by the Procurement Officer. The first Procurement plan should cover the first 18 months of the project lifecycle while the subsequent procurement plans should cover 12 months of the project lifecycle.



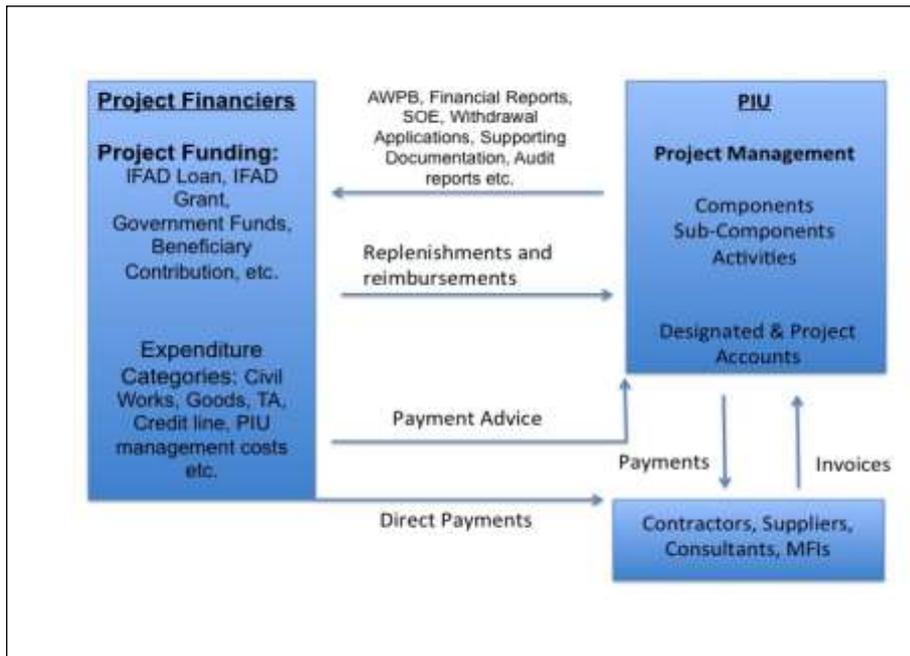
A sample of a budget and financing plan, procurement plan as well as a staff development plan is provided in Annex II.

2.2 Review of the AWPB

310. Every quarter, the FM should review the costs incurred during this time period. In case of differences between the planned and actual costs presented in the Annual Budget, the FM and the Programme Mangers heading each component should collectively identify the reasons for those differences and detail them in the periodic Financial Reports presented to IFAD. In case of internal problems identified during the costs review, the FM and Programme Managers should take the necessary steps to eliminate them. Otherwise, the budget for the next quarters should be readjusted to reflect the difference between actual and planned figures.

3.0 Accounting system

311. The majority of project activities result in the receipt, commitment or expenditure of funds. The accounting system records, processes and organises this data in order to produce useful financial information in form of AWPB, Financial Reports, Withdrawal Applications, Financial Statements etc. needed by the Project Financiers (IFAD, Government, Co-financiers, Beneficiaries) as well as the management. The accounting system should reflect the project's needs and be designed to provide the financial information required by all interested parties (DOF/BOFs, PPMOs, CPMOs and IFAD). It should also fulfil all the legal and regulatory requirements of the borrower. The accounting system is a critical part of the project's financial management system and its design.



(Chart 6: The operating environment of the project accounting system)

The FM is responsible for the following key areas related to the accounting system of the project:

- Designing the accounting system of the project
- Selection and maintenance of an accounting software.
- Development of an accounting manual

3.1 Designing the project accounting system.

312. When designing the accounting system of the project the FM must undertake the following steps:

Step one: Identify the different kind of reports the system is expected to generate, based on the different stakeholders requirements. - What information and in what format needs to be produced by the PMU? As a minimum requirement the Accounting system will need to produce the following reports:

- Statement of cash receipts and payments (by category and by financier),
- Statement of cash receipts and payments (by component),
- Statement of comparative budget and actual amount by component,
- Statement of Special Account movements,
- Statement of Special Account Reconciliations,
- SOE-Withdrawal Application Statement.

Step two: List the transactions and activities, which the system must account for. As a minimum requirement the accounting system must include:

- a) Purchase orders, receipts, check books and other similar documents evidencing receipt, commitment or expenditure of funds.
- b) A journal for primary entry of all transactions, including adjustments, destined to be posted to the ledger.
- c) A petty cash book (PCB) for small cash expenditures below a certain low threshold. The credit side of the PCB should be analyzed into columns, one for each project component, The totals to be posted to ledger accounts monthly.
- d) A bank cash book (one for each source of financing). The credit side should also be analyzed into columns, one for each project component (like PCB). Total of these columns should be posted to their respective ledger accounts monthly.
- e) A ledger containing separate ledger accounts for each project component. The debit side of each ledger account should be analyzed into the expenditure categories defined in the IFAD Financing Agreement (Civil Works, Equipment, Goods and vehicles, Technical Assistance and Studies, Training and Workshops, Credit Line, PMU Management cost). The ledger accounts should be closed and trial balance prepared at the end of each month.
- f) Fixed asset register to record location, price and date of acquisition (or completion) of all buildings, vehicles, computers, printers, major equipment and furniture. There register should have a separate section for each type of fixed asset.

Step Three: Design the specific accounting books, including a chart of accounts and records to be maintained, the transactions to be recorded therein and the precise accounting entries on the occasion of each transaction.

Step Four: Incorporate the systemic accounting issues as agreed with IFAD and the government including the used accounting standards and valuation criteria. - In accordance with the project design document, all project accounts will be kept on a double entry system and the used accounting standards will be IPSAS Cash.

Step Five: Resolve accounting issues (if any) rising from the fact that the project is being implemented and expenditures are being incurred in different locations (HQ vs. field office). - The field office is to provide monthly reports and to HQ by electronically by using the internet connection or by hand carrying a USB-stick.

Step Six: Determine a tentative list of users and user rights for each staff member in line with their terms of reference in order to maintain a proper level of security.

Step Seven: In the light of steps 1-5 decide, select and procure the accounting software that is able to satisfy the needs of the project. The FM needs to have an answer to steps from 1 to 5 before approaching a software company.

Step Eight: Incorporate all decisions of the previous seven steps in an accounting manual. This manual will need to be reviewed and updated once a year.

3.2 The Selection of an Accounting Software

313. The accounting software of the Project is an important tool for collecting, analysing, storing, and disseminating information that is vital for decision making. In addition, it enhances transparency and accountability of the project activities, provides timely reports, helps detecting errors and shortfalls during project implementation and indicates necessary corrections.

When choosing an accounting software the FM should ensure that the software is able to meet the following criteria:

- Reflect project needs and be designed to provide the minimum financial information required by all interested parties (PPMO/CPMOs, LPA, IFAD) including the provision of accurate, timely, complete, reliable and consistent information and reports as well as fulfil the legal and regulatory requirements of MOF/MOA;
- The accounting software should be configured as a modular solution and the different modules should be suitably integrated. The software should contain the following modules: i) general ledger module, ii) accounting module incl. petty cash, iii) budget module, iv) fixed asset module, v) contract management and procurement management module. - The integration of budgeting module accounting module/system is important to enable comparison of the actual performance with budgets/targets (quarterly, annual, and cumulative for the Project).
- Ability to account under different bases of accounting (cash, modified accrual, accrual)

- Use the double-entry system of transactions;
- Have multi-currency and multi-lingual capabilities and reporting;
- Allow for multi-period and multi-user processing and reports;
- Able to output financial reports in a variety of formats including hard copy printouts, as an excel spread sheet and as an HTML file;
- Provide adequate documentation and complete audit trail to facilitate audit.
- Have security settings and different access levels for different users
- Be user friendly. Technical support, training and installation & configuration should be offered by the supplier and be easily accessible during project implementation.
- For procurement needs, the accounting software should capture and report on the following: Prior review thresholds; Procurement methods thresholds; Procurement reference; Activity description; Component (as per the description schedule of the Loan); Category (as per disbursement schedule); Estimated amount; Procurement method used; Prior/Post review; Date of issuance of advertisement; Bank no objection on bidding documents (Goods/works) or RFP (consultants); Date of bid (Goods/works) or RFP (consultants) submission; Bid opening date (goods/works) or Financial Proposal opening date(consultants); Bank No objection to evaluation report; Bank no objection to contract draft; Date of submission to the Fund of the Copy of signed contract; Contract related data (date of signature, date of completion, contract amount, contract amendments and payments terms).

314. In the installation phase of the accounting system, FM will need to determine the following:

- access level and different user rights e.g. (i) active use for inputting/editing of data for different modules; (ii) read-only use; or (iii) no-access.
- Information storage and back-up
- Design of the chart of accounts and the detailed list ledger accounts required to account for transactions under the project.
- Design the detailed formats of various accounting books, records, and statements (e.g., cash and bank books, journals, various ledgers, trial balance, voucher formats, etc.).



A sample of a TORs for an accounting software is provided in annex IV

3.3 Accounting Manual

315. The Accounting Manual is an integral part of the financial management manual of the project. It is to be prepared by the FM and the DFM and will become effective after it has

been approved by the Steering Committee of the project. The accounting manual is to be reviewed and updated once a year.

316. When developing the accounting manual, it is essential that the FM and the DFM are familiar with the following:
- National legislation and IFAD Financing agreement including the reporting requirements
 - International Public Sector Accounting Standards (IPAS)- accrual basis
 - The features and user manual of the procured accounting software.
317. The accounting manual should as a minimum address the following subtopics:

Used accounting standards:

International Public Sector Accounting Standards (IPAS)- accrual basis

Chart of Accounts

The Chart of Accounts is used to: (i) capture the financial data under the appropriate headings and (ii) classify and group financial data for the various financial reports. The structure of the Chart of Accounts caters data to be captured by: (i) the Project components, sub-components, activities (ii) expenditure items under each component and sub-component, (iii) The IFAD expenditures categories for the Project, and (iv) sources of funding. Expenditure categories may also be recorded by using “cost centre” functionality which is commonly available in accounting software’s.

The structure of the Chart of Accounts should conform closely to the project cost tables (as presented in the project design report) to enable comparison of actual project costs during implementation with those estimated during the project preparation.

Budgeting and budgetary control

The project budget will be recorded in the budget module of the accounting software. Budgeting is discussed more in detail in section 2 of this manual

Recording and processing of transactions

318. Whenever a transaction takes place under the Project, it should be recorded and processed using the accounting software that meets the project’s specific accounting requirements. Processing of payments is discussed in detail in section 8 of this manual.

The recording of transactions under the Project follows the Cash basis of accounting with allows for the recognition of cash inflows in the period they are received and the reporting of expenses in the period those expenditures are paid.

Individual records of transactions are treated as source documents. For the project accounting purposes, the following source documents are considered:

- Purchase orders/ Contracts
- Purchase invoices
- Service invoices
- Consultants/engineers' reports

319. All transactions occurred should be registered in the accounting software in accordance with the date of occurrence and under the form of journals. The journal should contain sufficient and detailed information about the date of the transaction, its type, amount and reference to the source document. All the transactions should be entered on the accounting software using the principle of double entry, which means that each transaction should be recorded twice, once on the debit side of the transaction and once on the credit side of the transaction. The accounting software will automatically process those transactions and post them to the ledger accounts, which are accounts where all transactions of similar type are recorded. This processing of transactions also allows for the production of timely reports.
320. The DFM should reconcile the project accounts on a monthly basis. In case certain adjustments of entries in the accounting process have to be made, the DFM should produce a memorandum in which the reasons and the way in which the adjustment has been made is explained. The memorandum will be authorized by the PD after being cleared by the FM.

Petty cash management (not applicable if the project will not use petty cash)

The DFM will manage and periodically reconcile the petty cash account. The petty cash account is discussed more in detail in the section 6.2 of this manual.

Bank account reconciliations

The DFM will need to perform monthly bank account reconciliations between the different accounts. The reconciliation is discussed more in detail in section 6.3 of this manual.

Withdrawal of funds

The DFM will be responsible for preparing withdrawal applications to be submitted to IFAD. The necessary procedures are explained in section 7 of this manual and in the IFAD disbursement Handbook.

Financial reporting:

The DFM is not only in charge for recording the financial transactions on a daily basis but also for summing up the expenditures made under each component and sub-component and for each activity under those and posting the data on accounting/financial reports on a periodic basis during the reporting periods specified in the Letter to the Borrower and in the Financing Agreement. The DFM will also need to keep track and report on the availability of project funds in the different accounts (Designated accounts, project accounts and petty cash) as well as the commitments made by the PMU. The produced reports will be approved by the PD after

being cleared by the FM. The different financial reports are discussed more in detail in section 9 of this manual.

Fixed asset register

The DFM needs to maintain a fixed asset register recording all fixed assets in the fixed asset module of the accounting software. Fixed asset management is discussed more in detail in section 8 of this manual.

Period for which records are to be kept

The DFM needs to file the original records in an organised way to be maintained by the PMU/LPA for a minimum 10 years after the project completion. Record management is discussed more in detail in section 4 of this manual.

Access Levels

The access to the accounting system should be governed by the privileged metrics defining the levels of access by different users: (i) active use for inputting/editing of data; (ii) read-only use; or (iii) no-access. This would allow a separated and controlled access to the Accounting module (i.e. Journal recording, posting to the General Ledger). Each accounting transaction records the user's ID, preventing unauthorized access to the system and an adequate level of protection against the input of false data or the destruction of the records. At the same time, the data-sharing nature of the system involves a strict coordination and active data exchange among its various users (primarily the PMU). In this respect the system should ensure the reliability in information storage and fast data processing.

Revision of accounting manual

The accounting manual is to be reviewed and updated once a year.

4.0 Records Management

321. Financial records must be created and preserved for every financial transaction performed under the project. Financial records are defined as any financial information including written, computer data, internal forms, e-mails, or any other form of storage information originated from the PMU such as internal forms, journal vouchers financial reports (Monthly & quarterly) copies of checks and withdrawal applications etc. or received by the PMU such as supplier invoices and receipts, bank statements, IFAD documents etc. within the framework of the project's official activities. The objective of this procedure is to preserve the financial records and files for further official use by the LPA, for financial audit and for review by the Fund during the supervision missions. The projects financial records are the property of the LPA/MoF and cannot be removed or destroyed.



It is important to note that in accordance with the IFAD general conditions, the recipient/borrower has to maintain the original records for a minimum 10 years after the project completion.

4.1 Filing of the financial records

322. The DFM is responsible for filing the financial records created or received by the project. To fulfil this responsibility, the DFM must maintain chronological files in which the financial documents have to be filed for future reference. Filing should be performed daily to prevent the accumulation of papers and to ensure that the financial records are maintained in an up-to-date manner at all times. Each financial record should be filed under its code in a chronological order, with a sequential number assigned to every document. Any kind of additions or amendments to the financial document should be filed in a chronological order immediately following the principal document.

4.2 Storage of financial records

323. The financial records of the project should be stored in the PMU office, at the LPA for a minimum 10 years after the project completion. The data should be stored within the accounting software, as paper copies, as scanned copies and as computer disc copies. The Financial Officer 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. The Financial Officer should also classify the financial records as "Confidential", or "General". All important correspondences should be filed.

4.3 Archiving of financial records

324. In order to prevent an unnecessary pile-up of files in a limited office space, the FM should make sure that the financial records are archived on a regularly basis. Once a year, the FM 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.

4.4 Back- up procedures

325. To avoid the loss or damage of financial data, the information should be kept in two copies: i) at the computer server of the PMU/LPA and ii) in the locked cabinets of the PMU office. Only the PD, the FM and the DFM are allowed to access the financial records without authorization. The access of external persons is prohibited except for the auditors & IFAD staff.

5.0 Internal controls

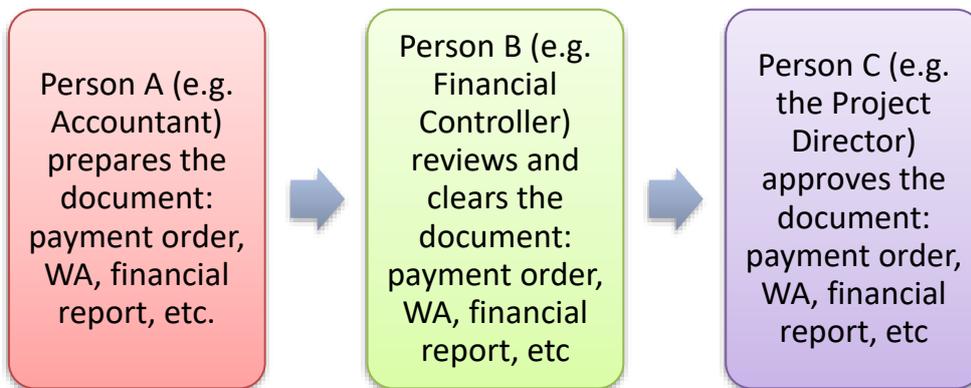
326. Designing, Installing, and maintaining a system of internal financial control is an integral part of the Financial management function. Internal financial controls aim to ensure) efficiency, ii) reliability, of financial reports and iii) compliance with applicable laws and regulations including the conditions set forth in the financing agreement. The key features of the internal control system are summarised below:

- Segregation of duties;

- Authorization;
- Reconciliations and checks;
- Restricted access; and
- Monitoring and review.

5.1 Segregation of duties

327. 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 FM's responsibility to ensure that the following duties are segregated under the project: preparation, authorisation, execution, custody, recording and the and operation of systems.



(Chart 7: Example of Segregation of duties)

5.2. Authorization

328. 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, bank and cash management cycle including reconciliation. The FM 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.

5.3 Reconciliations and Checks

329. Reconciliations between independent, corresponding sources of data are a key control for identifying errors and discrepancies in balances. The FM should perform the following reconciliations each month:
- Bank reconciliation
 - Reconciliation between system and special account receipts and payments statement
 - Any reconciling or balancing amounts 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.

In addition physical checks should be performed on assets held and on petty cash.

5.4 Restricted Access

330. 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

5.5 Monitoring and Review

331. As detailed in financial reporting section 9, periodic financial reports must be prepared and submitted to the fund. For the purposes of internal control the same information should be prepared and monitored by the PD 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 finance officer and the PD as a minimum. Where necessary, corrective action should be taken to ensure the authorized budget and procurement plan is not exceeded.

6.0 Flow of funds, cash and bank account management

332. The IFAD Loan will be disbursed over project duration of xx years. The Loan Closing Date is the xx anniversary of the date when the project was declared effective. IFAD disbursement procedures and the accompanied forms are outlined in detail in the Letter to

the Borrower and the Disbursement handbook which should be read in parallel with this manual. Please refer to section 7 of this manual for more detailed information on the IFAD Disbursement procedures.

6.1 Flow of Funds, opening of special accounts and project accounts

333. In accordance with the section 4.04(d) of the General Conditions, immediately after entry into force of the Financing Agreement, there shall be a Designated Account (DA) for the IFAD Loan denominated in the currency of the loan (USD/EURO) to be opened, through which IFAD funding shall be channelled. The DA is to be set up at and managed by DOF. DOF will be directly responsible for the management, maintenance and reconciliation of the DA activities. Supporting documents required for IFAD disbursements will be prepared and submitted by CPMOs through PPMO for review and verification before sending to DOF for further disbursement processing.
334. The PPMO and county CPMOs are responsible for reviewing the Disbursement Request as well as the supporting documentation required for IFAD disbursements. Disbursement Requests will be prepared and submitted by CPMOs to PPMOs for review and verification before sending the Disbursement Request to DOF for further disbursement processing. Once approved, project resources will be channeled directly from provincial level to county level .

In accordance with Section 3.1 of the LDH, the Designated Account will be administered following Imprest Account arrangements. Advances from this Financing must be segregated from other funds for the Project .

- 335. Additional general conditions precedent to withdrawal:** The following are designated as additional general conditions precedent to withdrawal
- (a) The Provincial Project Management Office (PPMO”) and at least one County PMO, the respective key Project staff shall have been selected;
 - (b) The Borrower, through the Lead Project Agency, shall have submitted, and the Fund shall have received, an official document confirming the availability of adequate counterpart funds for the first Project Year;
 - (c) The Designated Account shall have been duly opened : Documentation evidencing the opening of the Designated Account, with details of the names and titles of the persons authorized to operate the DA, must reach IFAD before withdrawal from the loan account can begin.
 - (d) the designated representative a letter designating the names of officials authorized to sign withdrawal applications which includes their authenticated specimen signature(s). The project is eligible and authorised to use the IFAD Client Portal (ICP), the applicable form is included in LTB.
 - (e) A draft PIM shall have been prepared and is acceptable to the Fund and
 - (f) A computerized accounting system acceptable to the Fund shall have been identified and selected by the Provincial PMO.
336. Upon fulfilment of conditions precedent to withdrawal and the Borrower’s request, the Fund will make one (or more) withdrawal(s) of up to the ceiling USD/EURO xxxx million for the loan (will determine after the project costs are provided) , and deposit such amount(s) into the Designated Account; DOF shall submit withdrawal applications

to replenish the Designated Account from time to time, based on expenditures, provided that the amount claimed is not less than 20% of the initial deposit. All withdrawals must be in line with projected expenditures as detailed in the approved AWPBs.

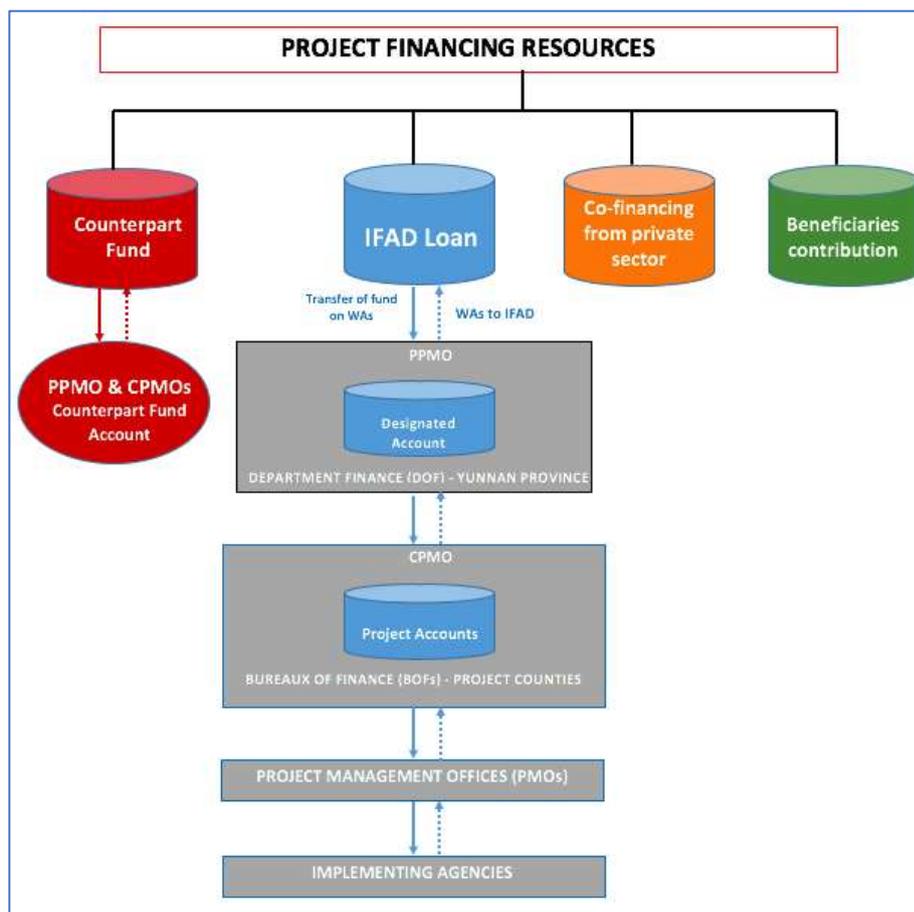
The following are the SOE thresholds that apply for withdrawal application under procedure (i) "Advance Withdrawal" and under procedure (iii) "Reimbursement": USD 300,000 for all expenditures categories.

337. PMOs and IAs shall maintain Implementation ledger Accounts in local currency in the Treasury System or commercial banks to receive the proceeds of the IFAD financing and/or the counterpart funding respectively. The County PMOs and BOFs will ensure that funds received at each level are transferred without delay. Separate bookkeeping is maintained by each of the IAs where Project activities will be implemented.
338. H2RDP will pilot a result-based Lending/disbursement (RBL) in selected sub-components. Replication at larger scale could be considered at mid-term on the basis of the positive results and lessons generated during implementation. The disbursement under RBL will be conditional to the achievement of agreed and independently verifiable targets or milestones. Detailed disbursement linked indicators need to be identified and verified by an assigned independent agency following agreed verification protocols.
339. FM procedures for the annual audit, verification on missions are still as part of the annual process. Project needs to ensure that verification on the funds used for the intended purpose, for efficiency, social equity, basically value added principles.

In accordance with Section 3.1 of the LDH, the Designated Account will be administered following Imprest Account arrangements. Advances from this Financing must be segregated from other funds for the Project .

340. **Retroactive financing** As an exception to the General Conditions for Agricultural Development Financing, IFAD will be seeking IFAD Executive Board approval that for retroactive financing from the loan up to a **maximum of 10% of the total IFAD financing (i.e \$US 6 million) for eligible expenditures incurred as from the date which the design document got approval by Quality** assurance group to the date of the entry in force of the financing agreement. Eligible expenditures for retroactive financing are considered those incurred to finance the start-up and preparation project activities such as : (i) purchase of essential items (including equipment and procurement of MIS system) for the PMOs; (ii) recruitment of project staff; (iii) costs related to tendering, selection, and recruitment of service providers; (iv) costs related to the finalization of the program implementation manual, customization of accounting software to fit IFAD requirement and license fees, start-up trainings and workshops; (v) establishment of the M&E system, including carrying-out of the baseline survey and development of MIS; (vi) exposure visits for knowledge and experiences sharing; (vii) surveys and feasibility studies; (viii) training and technical assistance for cooperatives, including recruitment of service providers, cooperative support field officers, technical advisors for business plans development, brokers/facilitators for linkages with supermarkets; and value-chain officers and monitoring & evaluation officers; and (ix) business plans.

341. **Financing of taxes:** In order to improve the efficiency of funds flow and better support project implementation, IFAD’s funds may be used to finance taxes that are not “excessive, discriminatory or otherwise unreasonable”. In case the Government intends to use IFAD financing to finance taxes that is impossible or impractical to exempt, the Government would need to formalize such request in writing. The amount of IFAD’s financing to be used to finance taxes will be further confirmed upon finalisation of project costs and taxes.



(Chart 8: Flow of funds of the project)

6.3 Bank reconciliation

342. The FM must perform monthly reconciliations between the designated account(s) balance recorded on bank statements and local cash book balance, recorded on the system. Performance of the monthly reconciliation should follow the following steps:

- i) Designate Account balance recorded on bank statement on reconciliation date is taken as starting figure;
- ii) Add reimbursements/replenishments/other deposits that have been processed and are due to designated account, but not yet recorded on bank statements;
- iii) Subtract undelivered cheques. Any long-outstanding cheques should be identified and investigated
- iv) Following these adjustments, the bank statement and local finance system cash totals should agree. Any remaining difference should be reported and investigated;
- v) The completed bank reconciliation statement should be signed by the FM; and
- vi) The reconciliation should be reviewed and countersigned by independent finance team member who understands the reconciliation process.

Periodic designated account reconciliations will be submitted IFAD as part of periodic progress report as outlined in section 9.



Please refer to annex XII (also form 104 of the Disbursement handbook) for a standard Designated Account Reconciliation Statement

7.0 IFAD Disbursement Procedures

343. The IFAD disbursement procedures are governed by the Letter to the Borrower (LTB) and the Disbursement Handbook, which will be sent the PMU/LPA upon the project effectiveness. The handbook is also available on the IFAD site <http://www.ifad.org/pub/basic/index.htm>.

As stated in the LTB and the LDH, four standard disbursement procedures may be used for withdrawal of financing:

Procedure I

344. Advance withdrawal (using imprest accounts or revolving funds with replenishment to a bank account(s) designated to receive financing resources in advance). This modality is used to advance and/or replenish funds to a bank account as designated by the borrower. The Fund may place a limit on the amount to be advanced and/or replenished. Relevant details on the modality – which is project specific – are agreed between the borrower and the Fund, and detailed in the LTB.

Procedure II

345. Direct payment. This modality is used for eligible project expenditures to be paid directly by IFAD, generally for large contracts, to suppliers, contractors, consultants or third parties, as authorized by

Procedure III

346. Reimbursement. This is applicable when eligible project expenditures, reimbursable under the financing, have been pre-financed by the borrower. Such reimbursements are expected to be claimed no later than 90 calendar days from the date of payment by the borrower.

7.1 Evidence of Authority to Sign Withdrawal Applications

347. The Fund requires the borrower's (or recipient'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). A sample template is provided in annex 1 of the disbursement handbook. 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/grant account.

The Fund must also be notified of the designated signatories for operating any designated and/or programme or other accounts, including changes thereto, whether or not these authorized signatories are included in the financing agreement. Such changes, as effected during the life of the project, must be communicated promptly to the Fund. The borrower, guided by the sample in annex 1 of the disbursement handbook, should provide the names and specimen signatures of the newly appointed signatories and include the date when such change is to take effect. The original of such changed documentary evidence is to be provided to the Fund.

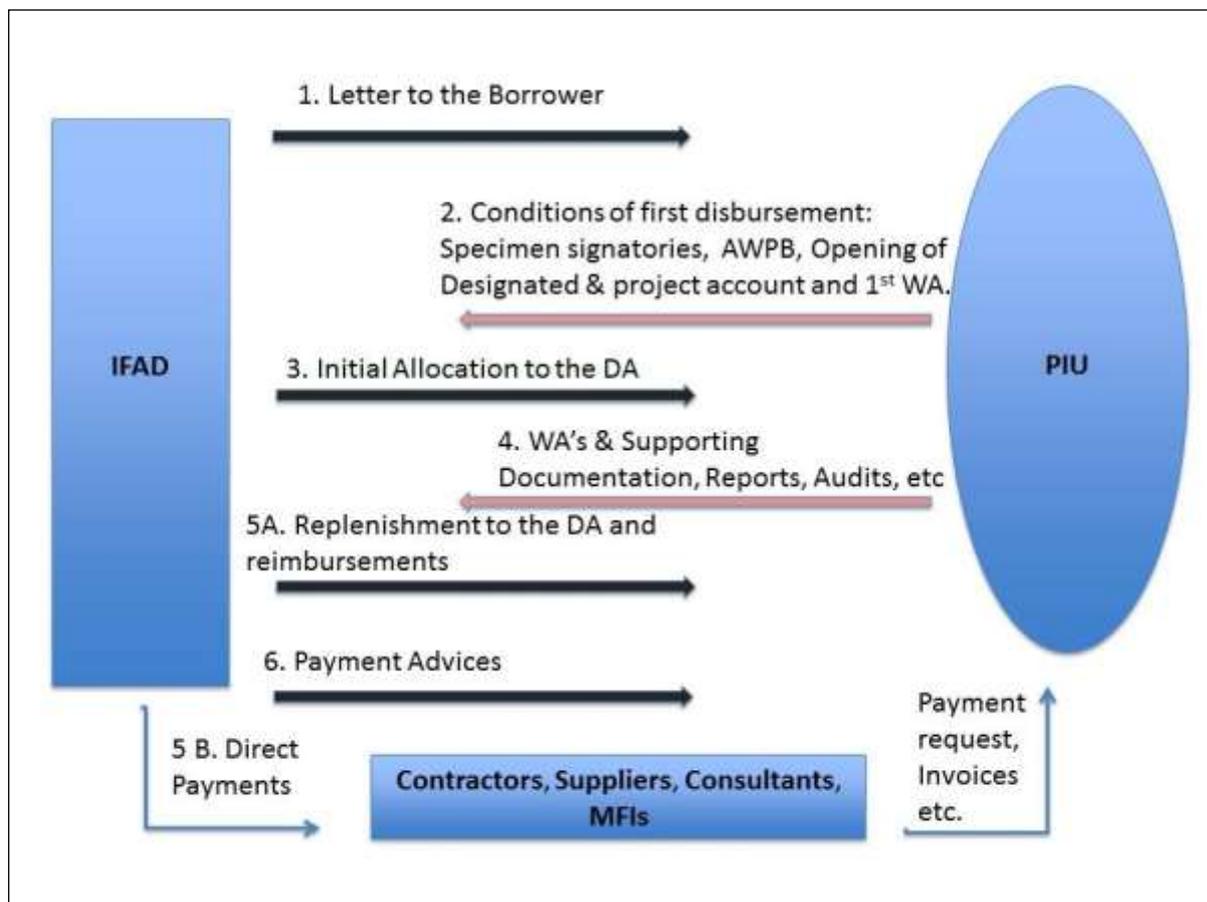
7.2 The Designated Account

348. The flow of funds for the Project starts with the opening of the project Designated Account (DA), denominated in the currency of the loan (USD/EURO) through which IFAD funding shall be channelled. The DA is to be set up at and managed by DOF. 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 PPMO records. Disbursements from the DA should be recorded in the PPMO account records as of the date they are made, that is when the checks are issued.

7.3 Withdrawal of Financing Proceeds and Supporting Documentation

349. Based on the Letter to the Borrower and the Disbursement Handbook, the withdrawal of all Project financing proceeds (direct payments to contractors from IFAD, and to reimbursements and replenishments to the designated account) is done through the use of Withdrawal Applications (WA) -form 100 in the disbursement handbook.
350. It is the FMs and the DFM's responsibility to make sure that the WAs are correctly prepared, the documentation is complete and submitted to IFAD in a timely manner. The necessary forms and supporting documentation to be attached to the WA (form 100) are outlined in detail for each disbursement method in section 3 of the Disbursement Handbook
351. Upon Project entry into force and after sending to IFAD, the letter designating the two officials authorized to sign Withdrawal Applications (WA) with their names and

specimen signatures, the FM will prepare the first Withdrawal application together with the necessary supporting documentation requesting the IFAD to transfer an initial advance to the designated account up to a ceiling of USD xxxxxxxxxxxxxx. Disbursement from the DA may then start for eligible expenditures under the Project.



(Chart 10: Withdrawal of IFAD Funds)

352. For the subsequent WAs, prepared by the DFM, the financial must ensure that the right supporting documentation is attached to the WAs before providing clearance. When submitted supporting documentation to IFAD should be copies the while the original documentation is to be retained by the PMU/LPA and securely located to enable inspection by IFAD representatives and auditors for a period of at least 10 after the project completion date in accordance with the IFAD General conditions.
353. As specified in chapter 3 of the IFAD disbursement handbook, for all payments (Works, goods, consultants' and other services) the following supporting documentation is required:
- a) The signed contract or confirmed purchase order (Showing the specified amount that is due paid. If this has been sent earlier to the fund a reference to the accompanying letter or document should be given in a footnote to the relevant Application summary Sheet –form 100)
 - b) The bank guarantee for advance payment, as specified in the contract documents
 - c) The bank guarantee for performance, as specified in the contract documents

- d) Copies of communications sent by the IFAD country programme manager to the lead project agency (LPA) providing the IFAD's no objection (post or Prior) to the contract award, and
- e) Evidence of payment.

For payments of goods, in addition to a-e:

- f) Supplier's invoice duly certified for payment by the PD – specifying the goods, their quantities and prices
- g) Bills of lading or similar documents; and
- h) As appropriate, the certificate of delivery (to include condition of goods to delivery)

For Payments of Consultants' and other services, in addition to a-e:

- i) The supplier's or consultant's claim, duly certified for payment by the PD 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 IFAD to relate each of these items to specific goods whose cost has been or is to be financed by the financing closing date; and
- j) As appropriate, a certificate of delivery of satisfactory services

For progress and retention payments of civil works in addition a-e:

- k) the claim if the contractor, including a financial progress report, stating the work performed and the amount due;
- l) 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
- m) A copy of the contract payment monitoring form signed in original by the certifying officer.

354. Together with each WA received for replenishment to the designated account, the project must submit the designated account reconciliation Statement, prepared by the DFM for the same reporting period in which the eligible expenditures are being claimed. This form needs to be accompanied by bank statements of the designated account and that of any other operating, district, project accounts ensuring that the closing bank balances for all these accounts correspond to the balances at the end of the same reporting period as indicated in the WA period.

In order to minimize transaction costs, the FM must make sure that withdrawals from the loan and/or grant account shall be made in amounts of no less than US\$ xxxxxxx or its equivalent, or such other amount as IFAD may designate in an advice to the borrower from time to time.

7.4 Use of Statements of Expenditures (SOE) and SEO Thresholds

355. The statement of expenditure (SOE) procedure is normally used for those expenditure types where it is impracticable or unduly burdensome to require submission of full documentation. However, the supporting documentations for the Statements Of Expenditures must be maintained by the PMO/LPA and made available for review by

IFAD supervision missions upon request and to external auditors during their annual review of project accounts to enable issuing of an independent audit opinion.

Details regarding the use of the Statement of Expenditure (SOE) are provided in section 4 of the disbursement handbook. In accordance with the Letter to the Borrower the SOE threshold applies for all project expenditures up to a threshold of USD 300 000.

The SOE thresholds above may be amended by the Fund during the course of project implementation.

8.0 Processing of payments

356. The Project will mainly finance, small works (rural roads, irrigation infrastructure etc.), consultants' services (design, supervision and studies), goods (office supplies, computers, cars), microfinance in the form of grants and credit as well as PMU operating costs (salaries, travel expenditures etc.). Last section outlined how the PMU will receive funds from IFAD to cover the incurred expenditures related. This section will outline the different steps involved in the outflow of funds from the PMU to the Contractors, Suppliers, and Consultants etc. The procurement process of these items, including the hiring process for consultants is detailed in the project procurement manual.

8.1 General instructions

357. For all payments, the FM should ensure that the following steps are performed:
- i) Preparation of Payment request voucher. A payment request voucher should be prepared for each payment.
 - ii) Validation of invoice. The following validation checks should be performed by the FM on invoice:
 - Invoice arithmetically correct; and
 - Quantity and price recorded on invoice should be checked back to contract, order, certification of completion/delivery

If there is any discrepancy identified, it should be raised with the vendor prior to proceeding with invoice processing,

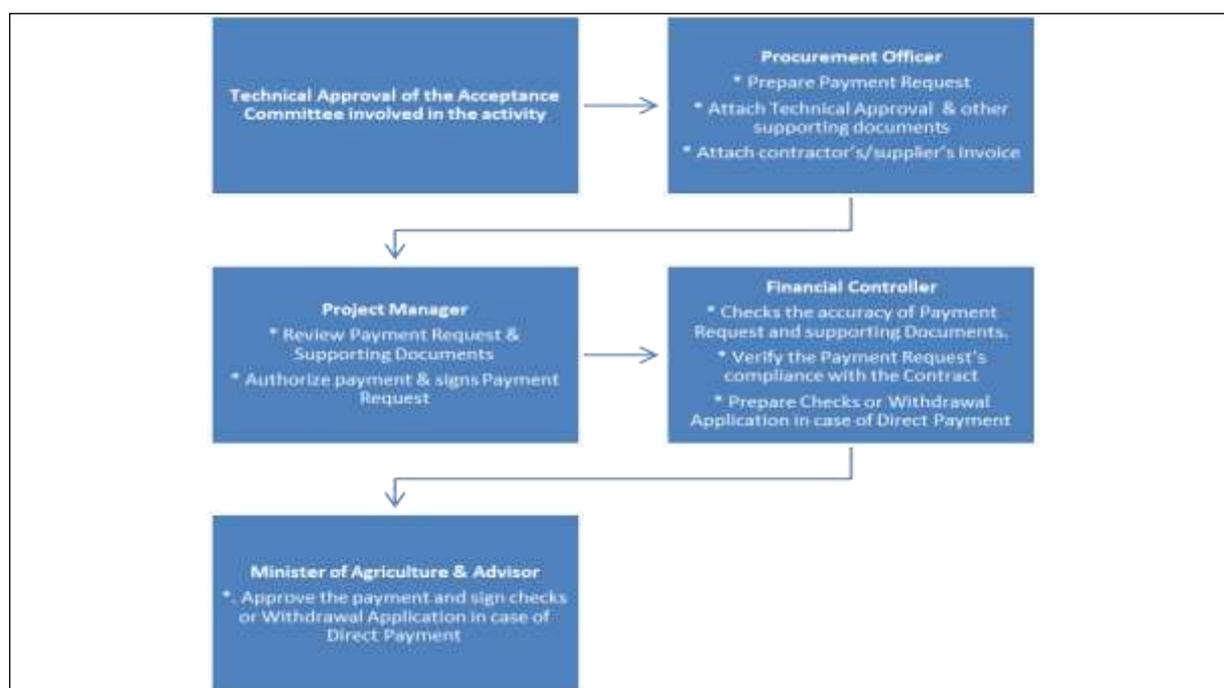
- iii) Supporting documentation: the following documents should be attached to the payment voucher to support validation:
 - Copy of invoice;
 - Copy of letter of approval from technical committee or the specialist, minister;
 - Copy of purchase order, goods received note and contract if applicable; and
 - Copy of required guarantees

All vouchers are authorized by the Minister after signatures of the FM, PD the and Director General of the LPA

8.2 Processing of payments for Civil Works and Goods

358. Project will incur expenditures related to works under Component 1; **Climate sensitive investments and capacity building** in the form of rural roads, irrigation infrastructure etc. and goods under components 01, *Sub-component 1.2. Investing in climate resilient infrastructure 3* (Project Management) in the form of fixed assets.

The Expenditure Cycle for works and goods is detailed in the following chart:



(Chart 12: Processing of payments for Works and Goods)

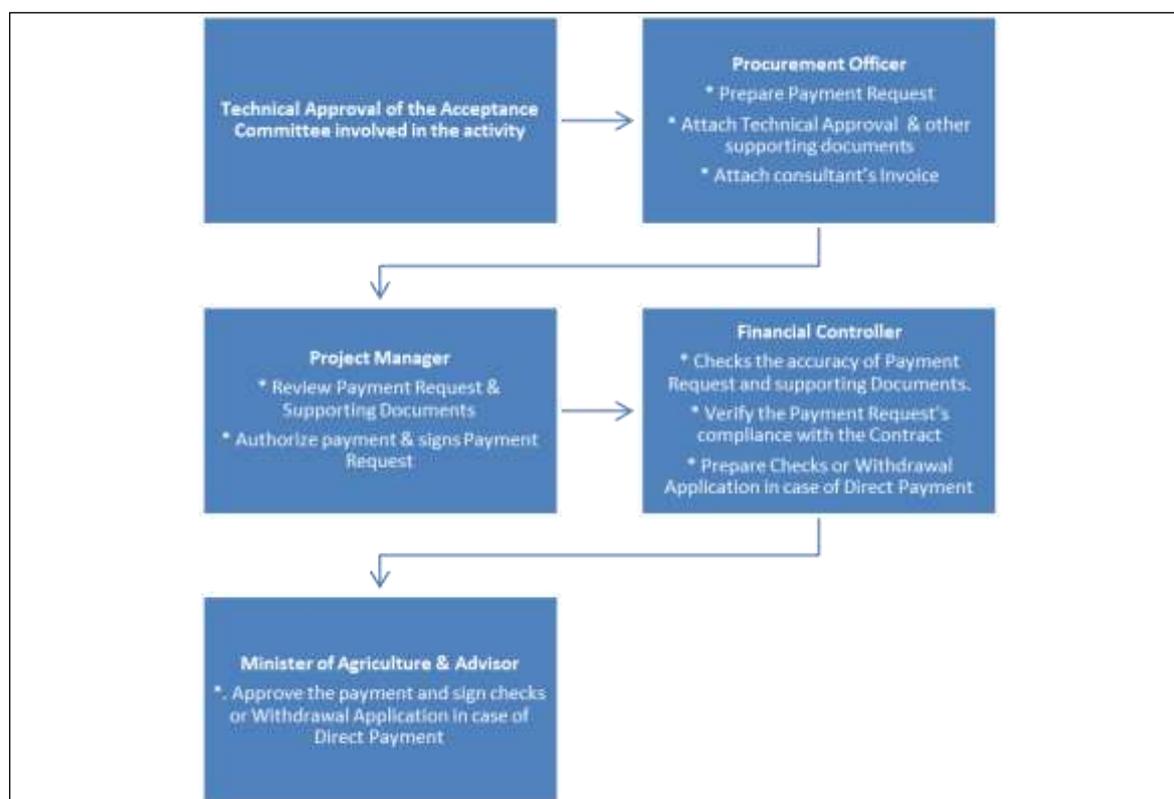
359. Before releasing the payment to the contractor or supplier, the FM will make sure the following processes are followed:
- A. The quantity of goods is checked back to the purchase order and to contract and bid award letter (if applicable). The committee members, assigned by steering committee/LPA after being assured that quality of goods is compliant with the contract conditions deliver an accepted delivery sheet or a compliant report to the Procurement Officer. The FM will ensure that the Procurement Officer provides all the necessary documents including the invoice and the acceptance/compliant report before proceeding with the payment.
 - B. The condition of the goods are reviewed for any damage or impairments. Damaged goods are to be identified and returned to the supplier/replaced. If any goods are rejected or returned to the supplier because they are not as ordered or are of sub-standard quality, the FM should be notified. FM must keep a central record of all goods returned to suppliers and maintain a separate record of all goods and equipment delivered by

suppliers by contracts funded by the IFAD financing.

C. All the works, are to be monitored by an architect or engineer. It is good practise to assign the architect/engineer responsible for the design to monitor and assess the works of the contractor. The architect or engineer is responsible for sending compliant reports/certificate of completion to the Procurement Officer in the PMU which includes the percentage of completion of the construction and if the construction materials are compliant with the contract conditions and specifications. A request for payment is prepared by the Procurement Officer to be send to the FM. The FM will ensure that the payment request includes all the necessary documents including the invoice and the compliant reports/certificate of completion before proceeding with the payment to the contractor for the completed phase.

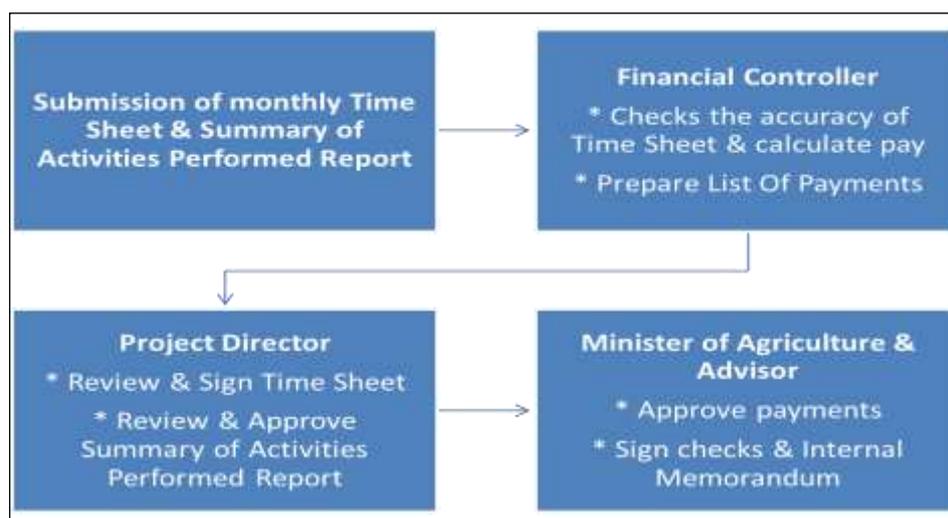
8.3 Processing of payments for Consultants' Services

360. Under the Project there are two types of consultants' services; a) Consultants with a lump sum contract, and b) Consultants with a time based contract. For type (a) consultants, payments will be made against the delivery of outputs as detailed in their contracts. For type (b) consultants, payments will be made against the submission of a time sheet and a summary of activities performed. PMU members will be paid against the submission of a monthly time sheet. The Expenditure Cycle for type (a) consultants is detailed in the following chart:



(Chart 13: Processing of Payments for consultants - type A)

The Expenditure Cycle for type (b) consultants is detailed in the following chart:



(Chart 14: Processing of Payments for consultants - type B)

361. Before releasing the payment to the consultant (firms), the FM will undertake the following steps:
- A) The consulting services reports are monitored by technical committees, assigned by the steering committee/LPA for the purpose of evaluating the deliverables submitted by the consultant (firms). Therefore the FM will ensure that no payment to the consultant is prepared unless an approved committee report or letter of approval received from the committee assures that the deliverable submitted by the consultant is compliant with the contract conditions, these documents should be passed first through the Procurement Officer.
 - B) The consulting services reports are monitored by the specialist responsible for the activity for the purpose of evaluating the deliverables submitted by the consultant (Individual Consultant). Therefore the FM will ensure that no payment to the consultant is prepared unless an approved report received from the specialist assures that this report is compliant with the contract terms and conditions, these documents should be passed first through the procurement officer.

All Supporting Documents and Internal Forms must be retained at the PMU Office in the LPA and must be maintained and archived in accordance with the maintenance of records section of this manual.

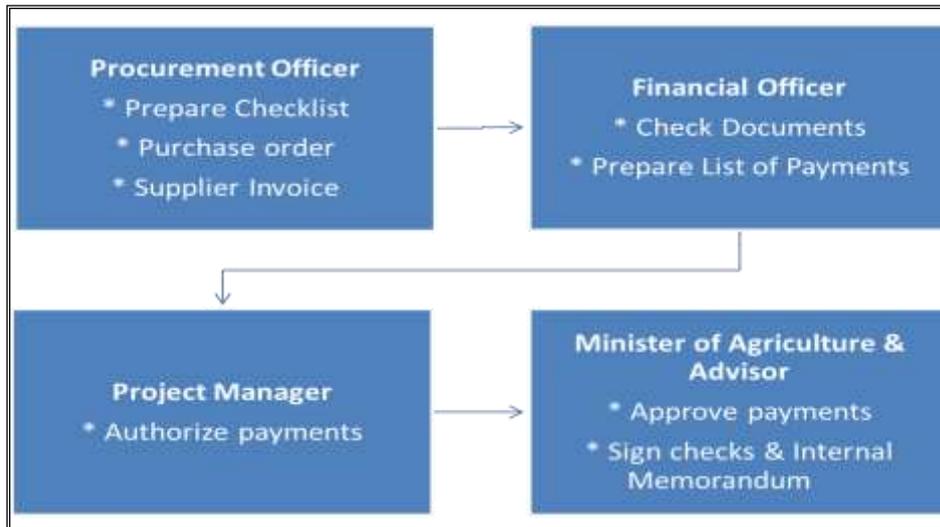
8.4 Processing of Payments for Office Supplies and Other Operating Costs

362. The payment for office supplies and operating cost will be against the preparation by the procurement officer of a serially numbered checklist evidencing the receipt of office supplies, and the presentation of the Purchase order and supplier invoice. The FM will compare the information on the checklist to the purchase order and supplier invoice, then sign the checklist. The payment for services is against the presentation by the supplier performing the service of a service invoice.

At the end of each month, the FM will prepare a serially numbered "List of Payments" that detail all the incurred costs for office supplies and operating costs during the month and present it to the PD

for review and authorization. After the PD's authorization of the payments, the FM will prepare the checks and send them to the PD who will prepare an "Internal Memorandum" detailing the check numbers, amounts, suppliers and explanation of payments. The "Internal Memorandum" and the checks will be presented to the Minister of Finance and his Advisor to approve the payments and sign the checks.

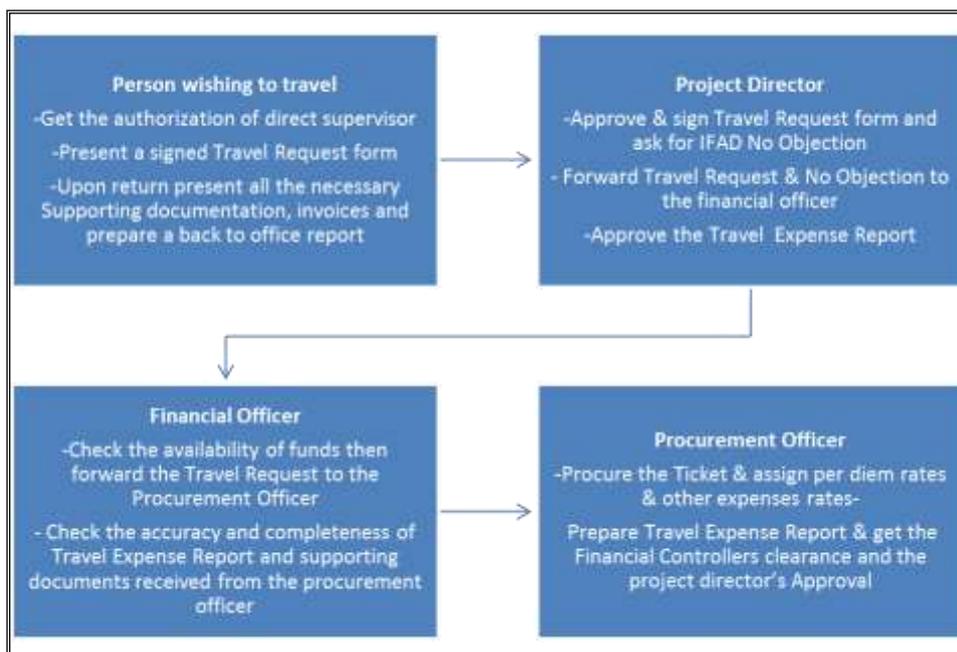
The following chart summarizes the process detailed above:



(Chart 15: Processing of Payments for Office supplies and operating costs)

8.6 Travel Arrangements & Processing of Travel Related Expenditures

363. Under the Project there is a budget allocated for workshops and study tours as well as staff training courses. The following chart summarizes the transaction cycle that should be followed to get approval for the travel and the expenditures related to it:



(Chart 16: Processing of Payments for Travel and Training)

9.0 Financial Reporting

364. Periodic financial progress reports are a formal requirement of the IFAD Financing Agreement. Sufficient information must be made available about what money is spent on, how much is spent and what the results are. The major financial reports include the following: AWPB, monthly financial reports, periodic financial progress reports, supervision reports, annual financial statements and audit reports.



(Chart 17: Project Financial reporting cycle)

In addition to the AWPB, supervision reports and audit reports (discussed in detail in section 2,

11 and 12 of this manual), the FM will ensure that the following financial reports are prepared in a timely manner and submitted to IFAD in due time (applicable to reports 2-4 only):

1. Monthly financial reports for PPMO internal use only. These reports will be verified during IFAD supervision missions.
2. Periodic (semi-annual) progress reports, to be provided to IFAD within 45 days after the reporting period
3. Annual financial statements, to be provided to IFAD within 4 months after the end of the project fiscal year.
4. Annual financial statements audited by an independent auditor acceptable to the Fund and in accordance with internationally accepted auditing standards and terms of reference cleared by IFAD, to be provided to IFAD within 6 months after the project fiscal year (explained in detail in section 11).

9.1 Monthly Reports

365. In accordance with best practises, the FM will prepare monthly financial reports based on the accounting system to aid management decision and control. The monthly management accounts will include the following.
- Monthly Budget Execution Report, summarising the budget-actual comparison of the expenditures incurred, component-wise and category-wise. The report will also include a list of commitments entered into and still to be paid, by component and by category.
 - Bank Reconciliation Statement (please refer to annex XIII or form 104 of the Disbursement handbook)
 - Petty Cash reconciliation form



Please see a sample of the above mentioned report in annex V

9.2 Periodic Progress Reports

366. Semi-annual progress reports should be submitted to IFAD no later than 45 days after the end of reporting period during the programme implementation period.

The importance of the periodic progress reports lies in the fact that they provide IFAD with sufficient information to determine whether the funds disbursed to the project are being used as intended, the project implementation is on track and the budgeted costs will not be exceeded. The financial information should be linked to the information on physical progress and procurement to give assurance that the financial and physical progress are consistent.

The Periodic Progress Reports include the following:

- **Project Statement of Cash Receipts and Payments by Category:** This report summarizes the sources of project financing, with the uses of funds in accordance with the disbursement categories foreseen in the Financing agreement with the Fund. This report also states the cumulative expenditures from the start of the project until the date of the report as well as the cash flow forecast for the following semi-annual period. The automated accounting system has been talor made to generate the report with all required details.

 The standard format for the presentation of this report is provided in Annex VI: Table 1.

- **Uses of Funds by Project category:** This report details the project expenditures by each expenditure category or sub category and by financier.

 A sample of a Uses of Funds by Project category is provided in Annex VI: Table 2

- **Uses of Funds by Project Activity:** This report details the project expenditures by each component or sub-component consistent with those foreseen in the Financing Agreement. The total planned, actual and cumulative expenditures in this report should correspond to those mentioned in the uses of funds section of the “Sources and Uses of Funds” report presented above.

 A sample format for this report is provided in Annex VI: Table 3

- **Cash flow forecast:** This report summarizes the cash inflow and outflow for the following semi-annual period and is explained in detail in section 9.3.

 A sample of a Cash Flow Forecast is provided in Annex VI: Table 4

- **Designated Account Reconciliation Statement**

 Please refer to annex XIII (also form 104 of the Disbursement handbook) for a standard Designated Account Reconciliation Statement.

- **SOE-Withdrawal Application Statement:** This report summarizes the claimed and received WA from IFAD during the reporting period.

 A sample of a SOE-WA statement is provided in Annex VI: Table 5

- **Contract Expenditures:** This report details all the contracts signed and amounts paid during the quarter by category.



A sample format for this report is provided in Annex VI: Table 6

- **Physical progress report:** This report summarizes the quantitative physical progress made in achieving overall objectives and links them to project expenditures by component and by category. This report should also contain a narrative part on the strategic direction for the next planning cycle as well as the main financial problems encountered.



A sample format for this report is provided in Annex VI: Table 7

9.3 Cash Flow Forecast

367. Preparing periodic cash flow forecasts is essential to ensure the project has sufficient funds to meet its commitments (expenditures to contractors, service providers, suppliers of goods, salaries of the PMU staff, operating and maintenance cost of the PMU such as rent, electricity, internet etc.) as they fall due. It is the FMs responsibility to prepare periodic cash flow forecasts by undertaking the following steps:
1. Determining the opening balance of the time period
 2. Determine (as accurately as possible) all the cash inflow already secured from different sources during the time period on a monthly basis.
 3. Determine (as accurately as possible) all the payments due during the time period on a monthly basis.
 4. Based on the calculation (steps 1-3) determine the estimated cash need for time period in question.

When preparing the cash-flow analysis, key sources for information include the AWPB (up-to-date), the procurement plan (up-to-date), disbursement timetable of all signed contracts and historic expense reports for PMU management costs as these can be assumed to stay relatively constant over the implementation period.

Based on the estimated cash flow needs, the FM in consultation with the PD will prepare an submit for approval the required withdrawal applications in a timely manner in order to ensure sufficient liquidity and avoid any delays to the project implementation.



Sample of a cash flow forecast is provided in annex VI, Table 4.

9.4 Annual Financial Statements and Audit Reports

368. IFAD requires that the financial statements are prepared in accordance with IFRS/IPSAS or IPSAS cash. (National Standards are also acceptable as long as they meet the minimum requirements) and that the annual statements are provided to IFAD within four months after the end of the fiscal year. In accordance with the Project Design Report, the project will prepare it financial statements in accordance with IPSAS cash.

The project financial statements should include the following information:

- Project Information and performance,
 - Statement of project management responsibilities,
 - Statement of cash receipts and payments (by category and by financier),
 - Statement of cash receipts and payments (by component),
 - Statement of comparative budget and actual amount,
 - Statement of Special Account movements,
 - Statement of Special Account Reconciliations,
 - SOE-Withdrawal Application Statement and Notes to the Financial Statements.



A sample of financial statements are provided in annex XV .

It is important to note that IFAD financing proceeds should be disclosed separately from the other financiers (donors, government, beneficiaries etc.). It is also important to note that where the project consists of more than one entity the lead-PMU must provide consolidated financial statements.

10.0 Fixed Asset Management

369. 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 FM

- Purchase of equipment
- Setting up and maintaining an asset register including verification
- Setting up a plan for disposal and/or handover of the asset once the project is completed

10.1 Purchase of Equipment

370. All procurement and payments for project equipment will be processed in line with the guidance provided in the procurement section of the PIM. The DFM financial officer should assign a unique, sequential asset number to all furniture and equipment items purchased (excluding minor items such as stationary). This must be clearly labelled on each item. Each item of equipment must be recorded in the fixed asset register

10.2 Asset Register

371. The DFM must maintain a register of all (material) project equipment. This will be recorded on the asset management module of the accounting software. The asset register should record the

following information for each individual piece of equipment: 1) Asset description, 2) Asset number, 3) Serial number of the item, 4) Officer responsible for asset, 5) Funding of asset (IFAD, government etc.), 6) Location; Date of purchase; and 7) Estimated life. The



A sample of a fixed asset register is provided in annex VII.

10.3 Asset Verification Review

372. The FM must ensure that a verification count of all equipment recorded in the fixed asset register is performed at least once a year. This should include the following checks:
- Verify that all equipment is still held in the location recorded on the register; and
 - Check that equipment is still in a reasonable state of repair.
 - 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 the financial officer and by the LPA.

The verification review must be performed by different staff from those who use the equipment, to ensure adequate segregation of duty.

10.4 Vehicle Maintenance and Fuel

373. The drivers are required to record all trips and fuel refills in a logbook and collect all the supporting documentation (invoices etc.). The vehicle logbook provides control over the use of the cars as well as fuel consumption. Fuel distribution is handled by the DFM. Fuel is purchased on an as-needed basis by giving coupons to the drivers who must use the selected fuel station. The PMU is billed by the station twice a month. Unused coupons are kept in the office safe in the custody of the DFM. For official missions, a special cash provision is given to mission leaders to allow them to purchase fuel (at reputable gas stations) during the trip.
374. The safety of cars is the responsibility of the recipient staff members and drivers assigned to the vehicles. Consequently, they must ensure that the cars are parked in a secure area when not in use or outside working hours. The drivers are required to monitor the maintenance of their assigned vehicles under the supervision of the PMU. The drivers must notify the PMU of maintenance needs so that the cars can be serviced on a timely basis. The cars must always be taken to the selected PMU garage for repairs and maintenance
375. The DFM should on a monthly basis review the mileage and fuel usage as well as any undertaken service as reported in the log book of each car and compare these with the official invoices and travel authorizations etc. to make sure the numbers are accurate.
376. An insurance policy must be taken by the PMU to ensure all cars and passengers against all risks, including damage, theft, fire, as well as injury and property damage to third parties. The insurance must also cover the same risks when the cars are used by the recipient staff members outside of normal working hours.



A sample of a vehicle log and vehicle history record log is provided in annex IX A & B.

11.0 Audit Arrangements

377. The project audit is an ex-post review of financial statements, records of transactions & financial systems; It examines the adequacy of accounting systems & procedures, capacity to maintain appropriate accounts & documentation of the project/grant expenditures. The objective of the project audit is to provide credibility and assurance of accountability.
378. The auditing is conducted by the DAO which is constituted as an independent body under the National Audit Office (NAO) and responsible for the audit for all IFIs projects in China. The Provincial Audit Office will be delegated to be responsible for auditing the project. PAO has rich experiences with WB, ADB and IFAD project auditing. The audited financial statements and a detailed audit report along with a Management Letter not later than six months after the end of each financial year.
379. IFAD will publicly disclose project financial statements and audit reports of projects financed by IFAD. In line with the standards of the International Aid Transparency Initiative, the government is encouraged to publish relevant financial information on their own websites, for increased accountability. The audit TORs shall explicitly mention the right of the borrower/recipient and of IFAD to publish the audit report, with no limitation-of-use clause.
380. The Audited financial statements need to be sent to IFAD no later than 6 months after the end of the fiscal year. The detailed instruction regarding project audit are outlined in the IFAD guidelines for project audits available at <http://www.ifad.org/pub/basic/index.htm>

11.1 The Audit Cycle and Appointing the Auditor

381. The complete audit cycle can be divided into the three main roles carried out by the FM/PPMO, the Auditor and IFAD.

The PPMO and the financial officer will:

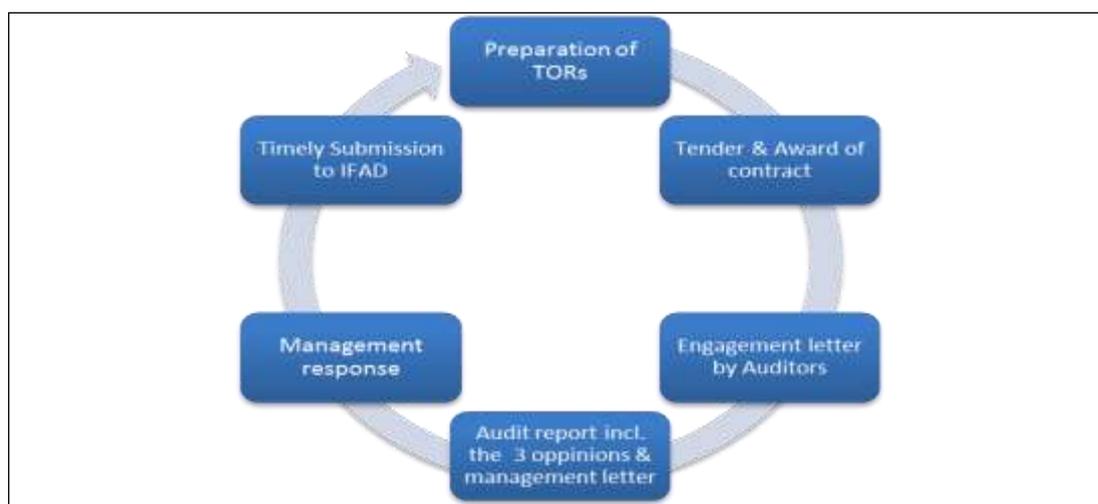
- Timely prepare TORs of the Audit and submit these to the Fund for no objection,
- manage the selection process of the auditor (if relevant)
- and appoints the auditor.
- Prepare the financial statements for reporting period
- Make available all the financial information necessary to the auditors.
- should respond to the audit findings and recommendations.
- Submit the audit report to the fund no later than 6 months after the end of the project fiscal year.

The Auditor will:

- perform the audit work including the the audit opinion
- Indicate any ineligible expenditures
- Provide a management letter

The Fund will:

- Provide a non objection to the auditors TORs
- Monitor timely submission and review of audit reports
- Follow up on remedial action\apply sanction and /or remedies if relevant including suspension of disbursement and or cancellation of loan balance (Legal Notice is sent to the LPA after 3 months of delay. Suspension of disbursement to the project after 6 months delay.)



(Chart 18: Project Audit cycle)

382. When appointing the auditor the financial officer will need to ensure that the following steps are followed:
- a) Financial Officer/PPMO prepares TORs for the auditor and sends it to IFAD for review and no-objection.
 - b) IFAD communicates “no objection” to borrower.
 - c) Financial Officer/ PPMO r initiates the procurement process using the agreed TORs.

- d) Financial Officer/ PPMO informs IFAD of the name of proposed auditor and the procurement process followed for the selection.
- e) IFAD communicates “no objection” to borrower on the selection of proposed auditor upon performance of the necessary due diligence.
- f) Financial Officer/ PPMO appoints the auditor.
- g) The auditor appointed normally issues a formal engagement letter

11.2. TORs of the Auditors and the Engagement letter

383. When preparing auditors TORs the financial officer should address the point outlined below:

- a) Description of the employing project authority or entity;
- b) Term of the auditor’s engagement, namely whether it is for a fiscal year or some
- c) other period;
- d) Description and the timing of the financial statements and other material to be provided by project management for the audit;
- e) Terms for delivery of the audit report;
- f) Specification that the audit be carried out in accordance with internationally accepted auditing standards;
- g) Provision of a management letter;
- h) Statement of access to project records, documents and personnel available to the auditor;
- i) Details regarding submission of a proposal and work plan by the auditor.

Furthermore, the contents of the TORS should include:

- a) A description in the TORs of the entity engaging the auditor and whether it is acting on behalf of or is a constituent part of a larger entity
- b) Legal and general descriptions of the project and the LPA, in sufficient detail to enable the auditor to understand their nature, objectives and activities.

384. The following additional information should also be considered:

- c) Organizational charts;

- d) Names and titles of senior managers;
- e) Names and qualifications of officers responsible for financial management, accounting and internal audit;
- f) name and address of any existing external auditor, if a change is made;
- g) Description of information technology facilities and computer systems in use;
- h) and
- i) Copies of the latest financial statements, financing agreement, minutes of financing negotiations, project design document, and annual work programme and budget, if it is available.

385. The auditors are required to provide a formal engagement letter confirming their acceptance of the appointment and outlining the methodology, scope and responsibilities under the audit. The borrower's representative will sign and return a copy of the letter to the auditor.



A sample of an engagement letter is provided in annex V of the IFAF guidelines for project audits.

11.3 The Audit Report

386. The Audit Report must include the following elements which should also be reflected in the auditor's TORs:
- An opinion on the Project's financial statements
 - In addition to the audit report, the independent auditor will prepare a management letter. This will include comment and recommendations on the adequacy of the financial management system, and on the system of internal control. The management letter should also include a follow up section on the status of implementation of previous years recommendations

12.0 IFAD Supervision

387. The project will be subject to extensive supervision from IFAD during the whole implementation period to ensure that the PMU fiduciary requirements are completed on time and to minimise the project's fiduciary risk.
388. If financial arrangements of the PMU are deemed acceptable, IFAD will rely on them to provide assurance that the financing proceeds are being used for the intended purposes. In the case that IFAD identifies weaknesses in the financial arrangements, it will require the PMU/LPA to take the appropriate measures to mitigate those risks e.g. changing the design and operation of internal control processes or modifying the disbursement arrangements for an operation.

The IFAD supervision of the project includes the following measures:

- Monitor of timely submission of audit reports and review of these reports
- Verify compliance to audit recommendations and recommendations made by past supervision missions.
- Monitor the submission of timely periodic financial reports and review of these reports
- Monitor disbursements rate and the quality of the received Withdrawal Applications
- Annual or semi-annual financial management supervision missions.

12.1 Supervision missions by the Fund

389. Throughout project implementation, IFAD will conduct annual financial supervisory missions to develop financial management ratings and ensure compliance with the IFAD's requirements. During the supervisory missions, IFAD will assess and monitor the adequacy of the PMU/LPA financial management arrangements such as accounting, budgeting, internal controls, flow of funds, financial reporting and the auditing practices. The key findings and recommendations of the mission will be captured in the Aid Memoire.
390. When preparing for and during an IFAD supervisions mission, the necessary supporting actions by the FM will include the following:
- Update and make available for the mission, the project financial information and especially the incurred expenditures by component, by category and by financier as of the last day of the preceding month.
-  Please refer to annex XI for the financial tables required for the aid memoire
- Update and make available reports on the status of counterpart funding (has the Borrower/Lead Project Agency made available financing proceeds to the Project as planned?)

- Provide a walkthrough of the existing accounting system including its main modules, budgeting, accounting, financial reports, fixed asset register as well as the security settings in use.
- Facilitate checking of the internal controls, by system “walk through” to ensure that approved procedures are consistently being followed.
- Make available Withdrawal Applications, Statement of Expenditures and all supporting documentation regarding expenditures claimed under the SOE thresholds to facilitate the verifying of adequacy, completeness and validity of claims.
- Make available evidence of qualifications and educational background of the financial staff including, organogram of the PMU, CVs, TORs of each position and PMU training plan.
- Update and make available a complete a fixed asset register and facilitate sample test check of physical existence of the asset.
- Make available written procedures regarding financial operations such as processing of transactions, financial administration manual, accounting manual, fixed asset maintenance and records management as well as the lead project agency’s anticorruption policy and whistle blowing procedures.
- Prepare and make available the updated bank account reconciliation statement and bank account statements for all designated and project accounts.
- Arrange meeting with the auditors and any other selected party requested by the mission.
- Make available all necessary documentation and contracts regarding procurement not subject to prior review.
- Provide an update on the actions taken regarding past audit recommendations as well as action points outlined in the past aide memoires.
- Make available the most recent AWPBs, annual and semi-annual reports
- Participate in report writing if necessary.

13.0 Loan completion and Closing

391. The closing of the loan/grant is due six months after the project completion date. Both the completion and the closing date of the loan have financial implications on the project management such as: development and submission of a recovery plan, ensuring eligibility of expenditures and submission of the necessary documents outlined below. Please also refer to section 1.3 of the Disbursement Handbook.

13.1 Recovery plan

392. To ensure that the designated account is completely and timely justified, the financial officer/PMU has to develop and submit to the Fund a so called recovery plan outlining the percentages per withdrawal application that will be recovered and paid respectively. The recovery plan should be submitted to the fund around 6 months before the completion date or when the outstanding balance (amount still undisbursed by IFAD) is less than the double of the authorized allocation.



Please refer to annex XII for a sample recovery plan.

13.2 Loan Completion

393. As defined in the Financing agreement the completion date of the loan is its 6th anniversary; that is six years after it entered into force. By the completion date all the project activities must have been finalised. The payments can be done also after the completion date, as long as the commitments/ contracts are signed prior to the completion date. Activities that have continued after the completion date are not considered as ineligible expenditures and can therefore not be financed by the IFAD funds.
394. After the completion date but no later than the closing date (six months after the completion date) the PMU can still incur expenditures related to so called winding up expenditures e.g. Final Audit, Project completion report, Project staff salaries involved in the winding up activities, PMU maintenance cost, project completion workshop.

13.3 Loan Closure

395. The Fund requires the following to be provided by the PMU in order to close the loan:
- Confirmation of last withdrawal application
 - Submission of final audit report
 - Submission of project completion report



The Final Audit Report has to cover the final project year up to the final expenditures and it can be paid from the loan available balance by using for example direct payment or Reimbursement of pre-financed expenditures.

Annexes:

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Annex II: Sample Annual Work Plan and Budget

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Annex XI: Required Aide Memoire tables for IFAD Supervision missions

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Annex I: Sample Job descriptions related to Financial Management and Administration

A. PD

396. Responsible for all aspects of IFAD projects implementation under direct supervision of the Steering Committee and the Lead Project Agency. Specific duties:
- Plan, organize and coordinate project implementation in line with rules and regulations and provisions of the loan/grant agreements.
 - Elaborate and review project documents as well as IFAD standard procurement and disbursement documents.
 - Organize, coordinate, monitor, and control the work plan, budget and procurement plan to ensure delivery of project outputs.
 - Ensure the efficient management of project resources in a transparent manner.
 - Supervise project disbursement, accounting and financial management and ensure eligibility of funds use in accordance with the loan/grant agreements.
 - Ensure that procurement of goods, services and works is carried out according to project design and IFAD procedures.
 - Manage the PMU staff to ensure efficiency, including appraising their performance annually.
 - Communicate the projects' objectives and components, to target groups including stakeholders to ensure sustainability and ownership of the project.
 - Assess qualifications and pre-qualifications of implementing partners, consultants, and contractors that may be selected for project implementation.
 - Negotiate contractual arrangements with various implementing partners and contractors.
 - Evaluate performance of implementation by governmental and non-governmental implementing partners, consultants and contractors.

- Prepare agreements with beneficiaries, stipulating the conditions of their participation.
- Ensure a close cooperation and coordination with other national and international development partners at national and district level.
- Update the Project Implementation Manual if and when necessary,
- Prepare quarterly and annual reports to IFAD, the steering committee and LPA as well as other stakeholders (if any).
- Develop and maintain a M&E and MIS to monitor project progress and performance.
- Ensure full compliance with directives issued by the Project Steering Committee and the LPA .

B. FM

397. Under the direct supervision of the PD , and within the framework of projects appraisal reports and loan/grant agreements, responsible for the financial and administrative management of the PMU , including Accounting, Budgeting , financial reporting, internal controls, auditing arrangement, flow of funds and the efficient management of projects resources. Specific duties:
- Prepare together with the PD the Annual work plan and budget and the budget and financing plan in particular.
 - Master IFAD key documents such as, the disbursement handbook, procurement guidelines and handbook, IFAD guidelines for project audits, the Financing Agreement (FA) and the Letter to the Borrower (LTB).
 - Develop and maintain an efficient accounting system and reliable internal control procedures and guidelines for financial reporting and recordkeeping.
 - Responsible for the preparation, review and monitoring of projects budgets including financing plan, procurement plan (together with the Procurement Officer), and staff development plan (together with the training focal point)
 - Prepare/verify all withdrawal applications for submission to IFAD, and ensure the availability of funds for all planned activities. Manage the projects bank accounts, approve and co-signs all payments.
 - Responsible for all project procurement, either directly or by delegation.
 - Prepare and provide financial reports including the sources and uses of funds statement, incurred expenditures by component, expenditure category and financier, designated account reconciliation statement, fixed asset list and cash flow forecast etc. for submission to the Project steering committee, LPA and IFAD on a semi and annual basis, and maintain all records in a form appropriate for audit.
 - Lead the process of contracting an external audit firm to conduct an independent audit of the annual project accounts, ensuring that annual audits are carried out within the specified timeframe.
 - Develop and maintain a system of financial control over all expenditure incurred by implementing partners.
 - Responsible for developing and managing an effective and performance based human resources management system.
 - Supervise and coordinate the work of staff placed under his/her direct authority.
 - Review and regularly update the Financial and Administrative Manual of the PMU.
 - Develop together with the Financial DFM the Accounting manual of the PMU.
 - Responsible for the organization and supervision of the PMU office, assets, logistics, and all administrative matters.

- Undertake any other activities assigned by the PD.

C. DFM

398. Under the direct supervision of the FM; specific duties include:

- Assist the FM in the implementation of a sound financial management system.
- Prepare financial reports, including monthly funds reconciliation, and monthly, quarterly, semi-annual and annual expenditure statements;
- Prepare transaction vouchers, and input all transactions into the PMU accounting system before submission to the FM for approval;
- Process all payments, ensuring that PMU procedures are strictly adhered to;
- Process monthly payroll, payment of salaries to staff and project contributions;
- Manage and report on the use of Petty Cash in accordance with the approved procedures;
- Assist the FM in the preparation of withdrawal applications;
- Prepare cash flow forecasts as required;
- Monitor financial returns from Implementing Partners, including periodic visits to their offices;
- Assist in the preparation and monitoring of annual operational budgets
- Functional supervision and training of Accounts & Administrative Assistants in PMU.
- Maintenance of a well organized and up-to-date filing system for accounting and financial records as well as an fixed asset tagging system;
- Perform physical inventory of project assets each year;
- Assist the FM in the preparation of the accounting manual of the PMU
- Provide assistance to the external auditors as required;
- Undertake any other activities assigned by PMU management.

D. Administrative Assistant

399. Under the direct supervision of the FM. Specific duties include:

- Assist the Financial DFM in the implementation of a sound financial management system.
- Assist the Financial DFM in preparing financial reports, including monthly funds reconciliation, and monthly expenditure statements;
- Assist the FA in prepare transaction vouchers, and input all transactions into the PMU accounting system before submission to the FM for approval;
- Assist the FA in process all payments, ensuring that PMU procedures are strictly adhered to;
- Assist the FA in process monthly payroll, payment of salaries to staff and Project contributions;
- Assist the Financial DFM and FM in the preparation of withdrawal applications;
- Assist the FA and FC in prepare cash flow forecasts as required;
- Assist in reviewing and monitor financial returns from Implementing Partners, including periodic visits to their offices;
- Assist in the preparation and monitoring of annual operational budgets
- Collate data received from colleagues into the system.
- Manage a well organized and up-to-date filing system for accounting and financial records;
- Assist in providing assistance to the external auditors as required;
- Undertake any other activities assigned by PMU management.

- Supervise the driver(s) and office attendant.
- Perform secretarial duties, including maintenance of a well organized filing system.
- Collect and review financial reports from implementing partners at district level.

Annex II: Sample Annual Work Plan and Budget

Table 1-4: Sample Budget and Financing Plan

Summary table 1: Planned Project Expenditures by Component and Financier

Component	Total		Financing Source				Beneficiaries
	Local	USD	IFAD Loan	IFAD Grant	Government (Budget)	Government (Tax)	
1. Rural Market Development							
1 a. Rural Market innovation strategy							
1b. Rural Market infrastructure							
1c. Women Capacity Building							
2. Irrigation Infrastructure							
3. Rural Finance							
4. Programme Management							
Total							

Summary table 2: Planned Project Expenditures by Expenditure Category and Financier

Category	Total		Financing Source				Beneficiaries
	Local	USD	IFAD Loan	IFAD Grant	Government (Budget)	Government (Tax)	
I. Civil Works							
II. Equipment, Goods and vehicles							
III. Technical assistance and Studies							
IV. Training and Workshops							
V. Credit line							
VI. Incremental Operating Costs							
Total							

Summary table 3: Planned Project Expenditures by Component and Expenditure Category

Component	1. Rural Market Development	1 a. Rural Market innovation strategy	1b. Rural Market infrastructure	1c. Women Capacity Building	2. Irrigation Infrastructure	3. Rural Finance	4. Programme Management	Total
Category								
I. Civil Works								
II. Equipment, Goods and vehicles								
III. Technical assistance and Studies								
IV. Training and Workshops								
V. Credit line								
VI. Incremental Operating Costs								
Total								

Table 4: Detailed Tables per Component, Expenditure Category and Financier

Category	Description of activity by Component/subcomponent	Items				Physical Outreach	Timeline					Financing Source					
		Unit	Unit cost	Quantity	Total		Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total	IFAD Loan	IFAD Grant	Gov. (Budget)	Gov. (Tax)	Benef.	
III. Technical assistance and Studies	1. Rural Market Development																
	1 a. Rural Market innovation strategy																
	value chain expert	consultant	30 000	1	3000 0												
	Awareness building Workshop	workshop	4 000	12	48 000												
	Baseline study	Study	500	3	1500 0												
	Local Market survey	report	120 000	1	1200 0												
	Seminar	Seminar	21 000	3	6300 0												
	Publications and booklets		15	5000	7500 0												
III. Techni	1b. Rural Market infrastructure																
	Feasibility study		10 000	1													

cal assista nce and Studie s						
	Awareness building seminar	20 000	4			
	Publications	20	200			
I. Civil Works	Rural roads	KM	4000	#### ###		

Table 5: Sample Procurement Plan

Table 5: Procurement plan																						
									Preparation of Tendering Process		Bidding Process					Evaluation Process				Contract		
Component	Subcomponent/Activity	Item	Unit	Quantity	Unit cost estimate (USD)	Total cost estimate (USD)	Financing Source	Procurement Method	Bid Document	IFAD no objection	Publication (date)	EOI	Response Time	Closing Date	Opening Session	Bid/quote evaluation (date)	Prior review required	Final report	No Obj	Notification of Award	Signature	End Date
WORKS																						
	item1																					
	item2																					
GOODS																						
	item3																					
SERVICES																						
	item4																					

Table 6: Sample Staff Development Plan

Table 6: Staff Development Plan								
Category	Component	Name and description of person(s)	Description of training activity	Proposed trainer/training institution	Loaction of the training activity	Estimated cost of the training activity (USD)	Additional costs (e.g. travel, accomondation. DSA)	Financing source
IV. Training and Workshops	4. Programme Management	Financial controller of the PIU	Financial Management Course	ITC/ILO	Turin Italy	4 000	3 500	IFAD Loan
IV. Training and Workshops	4. Programme Management	Administrative assistant of the PIU	advanced course in English	Professional Language Institute	Local	2000	na	IFAD Loan

Annex III: Sample chart of account (This will be adjusted once the cost tabs are finalized)

Chart of Accounts

<u>Account code</u>	<u>Account name</u>
1-00-0-0	Establishment of a Macro-Fiscal Analysis Unit
1-01-0-0	International Advisory Services
1-01-0-1	Macroeconomic Analysis & Modeling Advisor
1-02-0-0	Local Advisory Services
1-02-0-1	Full-Time Macroeconomic Analysis & Modeling Advisor
1-02-0-2	Fiscal Team Support Advisor
1-02-0-3	Public Enterprise Coverage Advisor
2-00-0-0	Public Expenditure Management
2-10-0-0	Cross-Cutting Issues
2-11-0-0	International Advisory Services
2-11-0-1	Legal Consistency Advisor
2-11-0-1	Senior Advisor PIP/ Loi-Programme
2-20-0-0	Expenditure Planning & Budget Formulation
2-21-0-0	International Advisory Services
2-21-0-1	Resident Budget Planning Advisor
2-21-0-2	Visiting Budget/ Sectoral MTEF Advisor
2-21-0-3	High-Level Review of BC / CoA Advisor
2-22-0-0	Local Advisory Services
2-22-0-1	Budget Preparation Advisor
2-22-0-2	Sectoral Economist A
2-22-0-3	Sectoral Economist B
2-22-0-4	Review of BC / CoA Advisor
2-30-0-0	Budget Execution, Monitoring & Audit
2-31-0-0	International Advisory Services
2-31-0-1	Senior Public Audit Expert
2-31-0-2	Treasury Management Strengthening Advisor
2-31-0-3	Budget Execution System Diagnostic & Solutions Advisor
2-32-0-0	Local Advisory Services
2-32-0-1	Treasury Management Strengthening Advisor
2-32-0-2	Development of a Cash Forecasting Tool (Software Development)
2-32-0-3	Budget Execution System Diagnostic Advisor
3-00-0-0	Debt Management
3-01-0-0	International Advisory Services
3-01-0-1	Debt Strategy Formulation Advisor
3-01-0-2	Cost Risk Analysis Advisor
3-01-0-3	Debt Strategy Implementation Advisor
3-01-0-4	Data & Debt Recording Advisor
3-02-0-0	Local Advisory Services
3-02-0-1	Debt Management Advisor
3-02-0-2	Legal Advisor
4-00-0-0	Aid Coordination & Management
4-01-0-0	International Advisory Services
4-01-0-1	Resident Aid Coordination & Management Advisor
4-02-0-0	Local Advisory Services
4-02-0-1	Aid Coordination & Management Advisor
4-03-0-0	Miscellaneous Expenses
4-03-0-1	Representation at Donor Meetings
5-00-0-0	Training & Capacity Building

5-01-0-0	International Advisory Services
5-01-0-1	Training Design & Implementation Advisor
5-02-0-0	Local Advisory Services
5-02-0-1	Training Coordinator
5-03-0-0	Miscellaneous Expenses
5-03-0-1	Workshops
5-03-0-2	Study Tours
6-00-0-0	Project Management
6-01-0-0	Local Advisory Services
6-01-0-1	Project Manager
6-01-0-2	Financial Management Specialist
6-01-0-3	Procurement Specialist
6-02-0-0	Miscellaneous Expenses
6-02-1-0	Operating Costs
6-02-1-1	Accounting Software
6-02-1-2	Office Equipment
6-02-1-3	Office Equipment Maintenance Expense
6-02-1-4	Stationary & Office Supplies
6-02-1-5	Advertising Expense
6-02-1-6	Post Expense
6-02-1-7	Translation Expense
6-02-1-8	Printing Expense
6-02-1-9	Bank Charges
6-02-2-0	Project Audit
7-00-0-0	A/C Payables
8-00-0-0	Bank & Related Accounts
8-01-0-0	BDL Designated Account
8-02-0-0	IFAD Account
8-03-0-0	Foreign Exchange Difference

Annex IV: Sample TORs for an accounting software

IFAD Project XXXX

Accounting Information System

A. Background

The LPA is currently in the process of implementing an IFAD Project XXXX. The project is implemented through a project implementation unit (PMU) within the LPA. In order to comply with IFAD's reporting requirements the LPA will need to procure an Accounting Software to be used by the PMU for the Project for the following purposes:

- 1) to collect, analyze, store, and distribute information that is useful for decision making
- 2) to provide transparency and accountability of the project activities,
- 3) to provide timely reports, help detect errors and deficits during project implementation and indicate necessary corrections, and
- 4) to prepare and present progress reports to the PMU, LPA and IFAD.

The project will be managed from the PMU/LPA located in the Capital and four regional offices situated in the districts of CC, BB, and BB where the project will be implemented. The main functions will be run from the PMU in the capital but accounting entries will also be executed from the regional offices in the three districts.

B. Specifications of the Software

General features

1. The Accounting software should be configured as a modular solution and the different modules should be suitably integrated, the following are the basic modules:
 - a. Chart of Account
 - b. Accounting
 - c. Financial Reporting
 - d. Budget
 - e. Assets
 - f. Withdrawal Application
 - g. Contract Management, and integrating other modules if needed.
2. classifying the levels of the Chart of account into four levels;
 - a. Type (Assets – Liabilities – Expenses)
 - b. General Ledger Account
 - c. Subsidiary Accounts
 - d. Subsidiary -1 Accounts, to end up with auxiliary accounts.
3. Handling all the financial transactions of the Project according to the chart of account, that is used to:
 - a. Capture the financial data under the appropriate headings
 - b. Classify and group financial data for the various financial reports. The structure of the Chart of Accounts caters data to be captured by:
 - i. the Project components and sub-components
 - ii. expenditure items under each component and sub-component
 - iii. The IFAD disbursement category for the Project

iv. Sources of funding

4. All vouchers used in the system are based on double entries.
5. Ability to account under different bases of accounting (cash, modified accrual, Accrual)
6. using adjusting entry when needed
7. Handling the definition of various currencies used by the system
8. Holding multi – donor’s information, with notification that no contract will have more than two donors.
9. recording the daily currency rates for all the predefined currencies, if reports can be demanded by Lebanese Government currency
10. Recording the loan number and source of fund.
11. Capacity to customize reports by e.g. exporting data to excel.

Financial reporting

12. Produce the periodic Financial Reports as requested by IFAD:
 - a. Statement of Cash Receipts and Payments per Project components showing quarterly, yearly and cumulative balances for the quarter and cumulative;
 - b. Statement of Cash Receipts and Payments per Project categories showing quarterly, yearly and cumulative balances for the quarter and cumulative;
 - c. Statement of Designated Account reconciling period-opening and end balances;
 - d. Statement of Project commitments, i.e., the unpaid balances under the Project’s signed contracts;
 - e. Statement of fixed assets,
 - f. Statement of Cash Payments using SOE.
13. produce other financial statements on a quarterly and annually basis, which are as follows;
 - a. Journal and Payment Vouchers
 - b. Statement of Special Accounts
 - c. Cost Center Statements
14. Progress report (physical) and not financial by contract, component and category (all projects). This request will involve:
 - a. A function will be designed and developed to allow the user to define the planned (estimated) physical % completion on each period (year, Quarter).
 - b. A function will be designed and developed to allow the user to enter/modify the actual reported on physical % completion on each period (year, Quarter).
 - c. An Inquiry function to display physical progress on each contract
 - d. A report showing detailed physical progress reporting per period
 - e. A report showing up-to-date physical progress reporting per period
15. .Consolidated report (financial report) of all projects managed under the software.
16. Recording the budget of all the activities of the project, and enable comparison of the actual performance with budgets/targets (quarterly, annual, and cumulative for the Project).
17. a fixed assets listing report indicating all relevant information (such as description, location, quantity, serial number, etc.) which needs to be updated and include any discrepancies between the regular physical inspection and the accounting records

18. Enhancement on the Withdrawal Application report to include the SOE and Summary sheet

Procurement

19. Keeping detailed records for all the contractors and consultants (ID number, Name, Nationality, Address, Phone, Fax, e-mail, contact name “position, phone number, fax, bank account bank address” and other information needed, and the accounting system should afford information regarding the procurement cycle that took place before contract signature and report on the following:
 - a. Prior review thresholds;
 - b. Procurement methods thresholds;
 - c. Procurement reference;
 - d. Activity description;
 - e. Component (as per the description schedule of the Loan);
 - f. Category (as per disbursement schedule);
 - g. Estimated amount;
 - h. Procurement method used;
 - i. Prior/Post review;
 - j. Date of issuance of advertisement;
 - k. Bank no objection on bidding documents (Goods/works) or RFP (consultants);
 - l. Date of bid (Goods/works) or RFP (consultants) submission;
 - m. Bid opening date (goods/works) or Financial Proposal opening date(consultants);
 - n. Bank No objection to evaluation report;
 - o. Bank no objection to contract draft;
 - p. Date of submission to the Bank of the Copy of signed contract;
 - q. Contract related data (date of signature, date of completion, contract amount, and contract amendments and payments terms).

Security

20. Handling the required security according to predefined system security and privileges.
21. The program has adequate security features including password protection , not possible to delete a posted transaction, controlled access
22. Includes proper backup and system maintenance procedures.

Training and support

23. Training of the Financial officer and head DFM and four regional DFMs on all features of the software.
24. Provide a complete and a user friendly manual
25. Configuration and Full installation of the software in seven computers, three in the capital four in the different regional offices.

C. Delivery time table

The commencement of services for this assignment is expected to be no later than the forth week of March 2012.

The main objective of the firm is to deliver a well designed software, that facilitates reflection of project needs and be designed to provide the financial information required by all interested parties (the LPA, Ministry of Finance and IFAD) and fulfil the legal and regulatory requirements of the Ministry Of Education.

The firm is expected to deliver the system during the phase mentioned below:

Ref	Deliverable's Title	Duration
	Deliverable 1 : install the present system	1 week
	Deliverable 2 : needed modifications should be applied on the system	3 weeks
	Deliverable 3 : Training sessions on the system	1 week.

Annex V: Sample Monthly Budget Execution Report

6. Monthly Budget Execution Report												
			ACTUAL			Planned/Budgeted			Variance			Commitments Entered (not payed) To - Date
			Current Quarter	Year-To Date	Cumulative To-Date	Current Quarter	Year-To Date	Cumulative To-Date	Current Quarter	Year-To Date	Cumulative To-Date	
Cash Payments per Component												
1-	Component 1											
		Sub Component 1.1										
		Sub Component 1.2										
		Sub Component 1.3										
2-	Component 2											
3-	Component 3											
4-	Component 4											
Total												
Cash Payments per Expenditure category												
	Category 1:Works											
	Cactegory 2: Goods											
	Category 3: Consultancy Services											
	Category 4: Credit line											
	Category 5: PIU cost											
Total												

Annex VI: Sample Periodic Financial Progress Report

Table 1: Sample Statement of Cash Receipts and Payments by Category

1. Statement of Cash Receipts and Payments by Category (all financiers)			
	Reporting Period (Quarterly/Semi-annually)	Cumulative	Forecast: next 6 months
	US\$	US\$	US\$
Receipts			
IFAD Loan Designated Account	R	R[^]	R*
IFAD Loan Direct payments	S	S[^]	S*
IFAD Grant Designated Account	T	T[^]	T*
IFAD Direct payment	U	U[^]	U*
Government Funds	V	V[^]	V*
Beneficiary Funds	Y	Y[^]	Y*
Total Receipts	P=R+S+T+U+Z+V+Y	P[^]=R[^]+S[^]+T[^]+U[^]+Z[^]+V[^]+Y[^]	P*=R*+S*+T*+U*+Z*+V*+Y*
I. Civil Works	a	a [^]	e
II. Equipment, Goods and vehicles	b	b [^]	f
III. Technical assistance and Studies	c	c [^]	g
IV. Training and Workshops	d	d [^]	h
V. Credit line	f	f [^]	j
VI. Incremental Operating Costs	g	g [^]	k
Total Payments	O=a+b+c+d+f+g	O[^]=a[^]+b[^]+c[^]+d[^]+f[^]+g[^]	W=e+f+g+h+j+k
Foreign Exchange difference	X	X[^]	
Receipts less Expenditures	=P-O+X	=P[^]-O[^]+X[^]	"=P*-W"
Opening Cash Balance Comprising IFAD Loan Designated Account IFAD Loan Direct payments IFAD Grant Designated Account	L	L[^]	G

IFAD Direct payment Project Account Counterpart Accounts (for government and beneficiary funds)			
Closing Cash Balances	=L+P-O+X	=L[^]+P[^]-O[^]	=G+P*-W

Table 2: Financial performance per expenditure category and financier

2. Summary of Expenditures by Loan Categories and By Financiers (USD)													
Loan Category	Description of category	Financing Source (USD)											
		IFAD Loan		IFAD Grant		Government (budget)		Government (Tax)		Beneficiaries		Total	
		Reporting period	Cumulative	Reporting period	Cumulative	Reporting period	Cumulative	Reporting period	Cumulative	Reporting period	Cumulative	Reporting period	Cumulative
I	Civil Works Equipment, Goods and vehicles Technical assistance and Studies Training and Workshops Credit line												
II													
III													
IV													
V													
VI	Incremental Operating Costs												
Total													

Table 3: Financial performance per component and per financier

3. Financial performance by financier by component (USD '000)																																	
Component	IFAD loan						IFAD grant						Government (Budget & tax)						Beneficiaries						Total						Total Allocation per design report	Revised allocation	
	Reporting period			Cumulative			Reporting period			Cumulative			Reporting period			Cumulative			Reporting period			Cumulative			Reporting period			Cumulative					
	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance	Planned	Actual	Variance			
Component 1																																	
Sub-component 1																																	
Sub-component 2																																	
Sub-component 3																																	
Component 2																																	
Component 3																																	
Component 4																																	
Total																																	

Table 4: Project Cash Flow Forecast

5. Semi-annual cash flow forecast						
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Cash Inflow						
IFAD Loan						
IFAD Grant						
Government						
Beneficiary						
Other Sources						
Total Cash Inflow	0	0	0	0	0	0
Cash Outflow						
Category 1: Works						
Category 2: Equipment, Goods and vehicles						
Category 3: Technical assistance and Studies						
Category 4: Training and Workshops						
Category 5: PMU cost						
Salaries						
Rent						
stationary						
etc.						
Total Cash Outflow						
Net Cash flow						
Opening Balance						
Funds Available						

Table 5: SOE-Withdrawal Application Statement

5. Statement Of Expenditures Withdrawal Application Statement						
By category of Expenditures in Local Currency						
WA submitted to IFAD						
		WA n..	WA n..		WA n..	WA n..
Category	Category Description					Total
1	AAAA	xx	xx		xx	xx
2	BBBB	xx	xx		xx	xx
3	CCCC	xx	xx		xx	xx
<i>Total</i>		<i>xx</i>	<i>xx</i>		<i>xx</i>	<i>xx</i>
In USD equiv/ Rejected from IFAD		xx	xx		xx	xx
<i>Net Reimbursed</i>		<i>xx</i>	<i>xx</i>		<i>xx</i>	<i>xx</i>
WA pending submission to IFAD						
		WA n..	WA n..		WA n..	WA n..
Category	Category Description					
1	AAAA	xx	xx		xx	xx
2	BBBB	xx	xx		xx	xx
3	CCCC	xx	xx		xx	xx
<i>Total</i>		<i>xx</i>	<i>xx</i>		<i>xx</i>	<i>xx</i>

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

Table 6: Signed Contract Listing

Reporting period:		Contract Information							
Disbursement Category	Contract Description	Contract Start	Contract End	Supplier/ Contractor Name	Contract No.	Total Contract Value	Total Contract Amount Invoiced to date	Total Disbursed on Contract	Total Undisbursed Amount
Category 1: Works									
Category 2: Equipment, goods And Vehicles									
Category 3: Consultancy services									
Category 4									
Total									

Table 7: Physical Progress Report

Table 7: Physical Progress Report										
Description of activities		Progress and Cost					Plan to completion			
Category	Project activity by component/Sub-component	Physical Progress to date		Cost to date			Revised		Original	
		Actual	Planned	Actual	Planned	Actual as % of Plan	Total cost	Completion date	Total cost	Completion date
1. Works	2. Irrigation Infrastructure Road infrastructure Road works Design Civil works -site clearance Civil works - construction Civil works finishing									
3. Consultancy services	1 a. Rural Market innovation strategy feasibility studies market survey									
4. Training and Technical assistance	1c. Women Capacity Building Workshops Training courses									
5. Credit line	3. Rural Finance Micro Credit Grants									

Annex VIII A: Petty Cash Request Form

Date: _____ Requested by : _____

Name

Mode of payment _____

Signature

Reimbursement

Advance

Description of purchases (goods/services)	Unit price	Quantity	Total cost**	Budget/ Activity code	Explanation / Comments
TOTAL AMOUNT*					

Approved by Processed by Payment received by

FM DFM

* Total amount cannot exceed xxxxx.

** Attach supporting document (invoice, receipt, etc.).

Annex VIII B: Petty Cash Reconciliation Form

Project _____ **Date of reconciliation** _____

Part i. Petty cash reconciliation

Petty cash balance brought forward (a) _____
 Replenishments during the current month (b) _____
 Total petty cash balance (c = a + b) _____
 Disbursements during the current month (d) _____
 Petty cash book balance (e = c - d) _____
 Cash count balance (f) – see part ii. below _____
 Difference (G = E - F) _____

Explanation Of Difference

Part ii - Cash Count

Description	Quantity	Total amount
bank notes		
500		
1 000		
2 000		
coins		
10		
20		
50		
total in local currency		

Counted/reconciled by (DFM) _____ Reviewed by (FC) _____

Date _____

Annex IX A: Vehicle Log

Vehicle registration number _____

Assigned driver _____

Date	Time		Mileage		Trip		Fuel purchase		Driver signature	Responsible staff
	Departing	Arrival	Departing	Arrival	Destination	Purpose	Mileage	Quantity		

Annex IX B: Vehicle History Record

Vehicle registration number _____
 driver _____

Assigned

Date	Repairs			Service & maintenance			Insurance			Fitness tests		
	Description of repair	Garage	Cost	Description of service	Garage	Cost	Type	Period covered	Cost	Checked by	Cost	

Report accidents in the space below, providing all relevant details for each occurrence:

- Date:
- Place:
- Name of driver:
- Circumstances:
- Damage to PMU vehicle:
- Damage to other vehicles:
- Injuries (indicate name of victims and describe injuries):
- Insurance settlement:

Annex X : Sample Terms of Reference for the Audit of Project XXXX

The following are the terms of reference ('ToR') on which **the LPA** agrees to engage **audit firm** 'the Auditor' to perform an Audit and to report in connection with the Agreement with the International Fund for Agricultural Development (IFAD) concerning **the project XXX** where in these ToRs the 'Contracting Authority' is mentioned this refers to **IFAD** which has signed the Agreement with the **Recipient/Borrower** and finances the services. The Contracting Authority is not a party to this engagement.

TERMS OF REFERENCE FOR THE FINANCIAL AUDIT AND FACTUAL FINDINGS OF

[TITLE OF THE PROJECT]

1. Background

The International Fund for Agricultural Development (IFAD) is aiding the borrower/recipient in the form of loan(s) [and/or grant(s)].

A financing [and /or grant] agreement or agreements has/have been signed between IFAD and the borrower/[recipient]; refer to appendix 1.

[Insert for private auditor]: IFAD requires the borrower/recipient to appoint an independent auditor to audit the accounts related to the project, in accordance with the IFAD Handbook on Financial Reporting and Auditing.

The reporting entity is [xxx].

The entity prepares its financial statements in accordance with [applicable accounting standard].

The auditor conducts its audit in terms of [applicable auditing standard].

[Insert any other information that may be relevant to the auditor].

2. Objective

The objective of this audit is to enable the auditor to express an opinion on whether the financial statements (including additional disclosures as outlined in section 5) present fairly, in all material respects, the financial position of the reporting entity as at [insert year-end date], and/or the results of its operations and its cash flows for the years then ended, in conformity with the [applicable accounting standards].

3. Responsibilities of the borrower/[recipient]

i. General

Provide financial statements for the activities financed by the loan/[grant] that are reconcilable to its records and accounts.

Provide the auditor with access to all legal documents and correspondence with consultants, contractors and other persons or firms engaged by the

project, and any other information associated with the project and deemed necessary by the auditor.

Ensure that the accounting policies are consistently applied and disclosed.

Ensure that appropriate internal controls are implemented to prevent misstatements and susceptibility to fraud.

Ensure compliance with all relevant laws and regulations that pertain to the entity, as well as with the financing agreement between the

borrower/[recipient] and IFAD.

Provide the financial statements to the auditor within a reasonable time and be available for any queries that the auditor may have.

ii. Financial statements

The borrower/[recipient] shall:

Prepare financial statements covering the reporting period [date] to [date], in accordance with [IPSAS/IPSAS “Financial Reporting under the Cash Basis of

Accounting” standards]. In addition, the following specific disclosures will be included in the financial statements:

Withdrawal application summary – appendix 1 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

Sources and uses of funds statement – appendix 2 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

Designated Account statement and reconciliation – appendix 3 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

[Statement of Expenditure – appendix 5 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects] – application to grants;

[Expenditure transaction list - appendix 6 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects] – applicable to grants.

4. Responsibilities of the auditor

i. Auditing standards

The auditor is responsible for the formulation of an opinion on the financial statements in accordance with [ISA/ISSAI/national auditing standards];

ii. General principles

By agreeing to these terms, the auditor confirms that:

The firm is independent from the project, its staff and activities, in accordance with international best practices.

The firm is not providing consultancy services to the project or preparing its project financial statements (nor has it done so in the previous two years).

The auditor is suitably qualified and a member of a professional body affiliated with the International Federation of Accountants.

[The office of [public auditor] is a member of the International Organization of Supreme Audit Institutions (INTOSAI).]

The auditor is able to conduct the audit in line with auditing standards acceptable to IFAD, pursuant to paragraph 4.1.

The firm can assign an audit team to the audit that has the necessary competence and skills.

The firm has a proven track record in conducting audits of a similar nature and complexity.

iii. Management letter

The management letter is an integral part of the audit package that documents accounting and internal control issues identified by the auditors. The management letter should:

Outline the auditor's recommendations to improve identified accounting and internal control issues;

Include the responses of project management to the identified control issues, and its proposal to address the issues identified within a specific time period.

Where applicable, follow up on the issues identified in the previous year's management letter.

iv. Reporting

The Auditor is required to deliver an audit package that includes:

The audited financial statements, including additional disclosures as outlined in paragraph 3.2;

An audit opinion on the financial statements, within the scope as outlined in paragraph 5;

[A report on factual findings, within the scope of agreed-upon procedures as outlined in paragraph 6.] Any ineligible expenditure identified should be

clearly mentioned.

A management letter, including the information outlined in paragraph 4.3;

The audit report should provide sufficient detail as to the nature and extent of the

procedures performed by the auditor. The auditor is required to provide the audit package by no later than [insert date]. Reports are to be delivered in English.

5. Scope of the financial audit

In performing the audit, at a minimum the auditor shall:

Obtain an understanding of the internal controls related to the financial reporting process, to identify and assess any weakness in internal control that

might result in misstatements, whether due to fraud or to error;

Design and conduct audit procedures in response to any weaknesses identified in the internal controls relating to the financial reporting process, to obtain

audit evidence that the financial statements are fairly presented and free from material misstatements, in accordance with the applicable accounting framework;

Verify whether expenditure that was incurred in the name of the project is in

line with the terms of the financing agreement(s) (appendix xx) and incurred for the purposes intended in this agreement. Both IFAD and third party funding should be taken into consideration;

Verify that the inventory and fixed assets held by the entity exist, are complete, are properly accounted and are used for the project purposes;

Note any weaknesses in the internal control environment and in the financial reporting process, and communicate those in the management letter.

[List others].

6. Scope of the agreed-upon procedures

The auditor is required to perform the following specific procedures and report on factual findings as required in paragraph 4.4.

i. Withdrawal application summary

The auditor is requested to obtain the individual withdrawal applications (WAs) submitted to IFAD, as summarized in the withdrawal application summary, and develop test procedures to:

Determine whether the Designated Account currency equivalent was determined using the historical exchange rate of transfers to the operating

account;

Determine whether goods and services have been purchased through the SOE mechanism in line with the stipulated SOE threshold;

Determine whether the expenditures claimed through SOE procedures were properly and appropriately authorized, classified⁴⁷ and supported by audit documentation;

Identify any ineligible expenditure;

[List additional procedures, if applicable].⁴⁸

ii. Designated account statement and reconciliation

The auditor is requested to review the activities of the designated account(s) associated with the project, including the initial advance, replenishments, interest that may accrue on the outstanding balances, and the year-end balances. The auditor is requested develop test procedures to:

Check the accuracy of the Designated Account reconciliation(s);

Confirm that the Designated Account(s) have been maintained in accordance with the provisions of the financing agreement;

[List additional procedures if applicable].

7. Public disclosure

IFAD promotes public disclosure of project financial information to enhance the level of transparency and accountability. IFAD will disclose project audit reports, as appropriate, in line with the Fund's disclosure policy. Management Letters issued by auditors are not subject to public disclosure by IFAD. In agreeing to the terms of reference, the auditor explicitly acknowledges IFAD's right to publicly disclose audit reports (audited financial statements and audit opinion) and will issue reports without a limitation of use clause.

To facilitate the public disclosure process, the auditor is requested to submit two separate files as follows:

- Audited financial statements and audit opinion; and
- Management Letter.

Annex XI: Required Aide Memoire tables for IFAD Supervision missions**Table 1: Cumulative expenditures by component and Financier -as at DD/MM/YYYY (USD '000)**

	IFAD Loan	IFAD Grant	Benef.	Government	Total
1. Rural Market Development					
1 a. Rural Market innovation strategy					
1b. Rural Market infrastructure					
1c. Women Capacity Building					
2. Irrigation Infrastructure					
3. Rural Finance					
4. Programme Management					
Total					

Table 2: Budgeted Expenditures and Performance against previous year's AWPB (USD '000)

	IFAD Loan	IFAD Grant	Benef.	Government	Total	Financial Performance (%)
1. Rural Market Development						
1 a. Rural Market innovation strategy						
1b. Rural Market infrastructure						
1c. Women Capacity Building						
2. Irrigation Infrastructure						
3. Rural Finance						
4. Programme Management						
Total						

Table 3A: Financial performance by financier - as at DD/MM/YYYY

Financier	Approval (USD '000)	Current (USD '000)	Disbursements (USD '000)	Per cent disbursed
IFAD loan				
Government				
Private sector				
Beneficiaries				
Total				

Table 3 B. Financial performance by financier by component - as at DD/MM/YYYY (USD)

	IFAD Loan			Govern ment			Private sector			Beneficiaries			Total		
	Ap pr.	Act ual	%	Ap pr.	Actual	%	Ap pr.	Act ual	%	Ap pr.	Act ual	%	Ap pr.	Act ual	%
1. Supporti ng inclusive rural developm ent															
a. Improv ing Chan ye fupin model															
b. Stimulat ing entrepren eurship															
c. Improv ing access to finance															

a. Improv g infrastruct ure climate resilience					
b. Improv g rural infrastruct ure					
4. Program me Managem ent					
TOTAL					

**TABLE 3 C: Expenditures by category - as at DD/MM/YYYY
(USD)**

Category description	Original Allocation	Revised Allocation	Expenditures	W/A pending	Balance	Per cent Spent
I. Civil Works						
II. Equipment, Goods and vehicles						
III. Technical assistance and Studies						
IV. Training and Workshops						
V. Credit line						
VI. Incremental Operating Costs						
Unallocated						
Total						

Annex XII: Sample recovery plan

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		
Particulars Reporting Period	WA No.	Date	US \$	EUR	SDR	Unjustified balance USD SDR		
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		
In accordance with IFAD procedures, any amount unjustified at the time of loan closing date will be promptly refunded to IFAD.								
Prepared by:						15-Oct-11		
						Date		
Confirmed by:								
						Date		

PIM H2RDP

e.g.	counterpart financial resources to be reimbursed	USD
e.g.	cheques not yet cleared/presented to Bank	USD
12 DATE	_____	SIGNATURE
		_____ Name in full
		_____ Title in Full

Annex XV: Sample Project Financial Statements

Project Name.....

Implementing Agency.....

IFAD Loan/Grant Number.....

PROJECT FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 200X

Prepared in accordance with the Cash Basis of Accounting Method of the International Public Sector Accounting Standards (IPSAS)

PROJECT NAME AND NUMBER

FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 200X

CONTENTS	PAGE
Project Information and performance	1
Statement of project management responsibilities	2
Report of the independent auditor	3
Statement of cash receipts and payments (by category)	4
Statement of cash receipts and payments (by component)	5
Statement of comparative budget and actual amount	6
Statement of Special Account movements	7
Statement of Special Account Reconciliations	8
SOE-Withdrawal Application Statement	9
Notes to the Financial Statements	10-11

PROJECT NAME AND NUMBER

PROJECT INFORMATION AND PERFORMANCE

PROJECT NAME AND NUMBER

- **Institutional Details/Information:** Implementing agency, status, location, names, account numbers and address of bankers (Special and Project accounts) name and address of independent auditors
- **Members of the Project Coordinating Unit:** Names and roles
- **Background Information on the Project:** Source of financing: size of Loan/Grant(s), effective and closing date(s)
- **Project Objectives:** As per Design Completion/Appraisal Report
- **Project Costs:** By component and category of expenditures as per Financing Agreement and Design Completion/Appraisal Report
- **Summary of Performance:** Physical progresses as per Progress/Supervision Reports

PROJECT NAME AND NUMBER

**STATEMENT OF ACCOUNTING OFFICER AND PROJECT
COORDINATOR'S RESPONSIBILITIES**

PROJECT NAME AND NUMBER
STATEMENT OF RECEIPTS AND PAYMENTS (BY CATEGORY OF EXPENDITURES)
FOR THE YEAR ENDED DECEMBER 31, 200X

		Notes	200X	200X-1	Cumulative to date
			Local currency	Local currency	Local currency
	Balance B/F	4	XXX	XXX	
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 CATEGORY OF EXPENDITURES)					
Cat	IFAD CREDIT				
1	AAA	9	XXX	XXX	XXX
2	BBB	9	XXX	XXX	XXX
3	CCC		XXX	XXX	XXX
4	DDD		XXX	XXX	XXX
5	EEE		XXX	XXX	XXX
6	GGG		XXX	XXX	XXX
7	HHH		XXX	XXX	XXX
8	LLL		XXX	XXX	XXX
			XXX	XXX	XXX
	Government Funds				
1	AAA		XXX	XXX	XXX
2	BBB		XXX	XXX	XXX
	TOTAL		XXX	XXX	XXX
	TOTAL PROJECT EXPENDITURES		XXX	XXX	XXX
	BALANCE C/F	4	XXX	XXX	XXX

**PROJECT NAME AND NUMBER
STATEMENT OF RECEIPTS AND PAYMENTS (BY COMPONENT)
FOR THE YEAR ENDED DECEMBER 31, 200X**

		Notes	200X	200X-1	Cumulative to date
			Local currenc y	Local currenc y	Local currency
	Balance B/F FINANCING	4	XXX	XXX	
	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)				
Comp	IFAD CREDIT				
A	AAA		XXX	XXX	XXX
B	BBB		XXX	XXX	XXX
C	CCC		XXX	XXX	XXX
			XXX	XXX	XXX
	Government Funds				
A	AAA		XXX	XXX	XXX
B	BBB		XXX	XXX	XXX
	TOTAL		XXX	XXX	XXX
	TOTAL PROJECT EXPENDITURES		XXX	XXX	XXX
	BALANCE C/F	4	XXX	XXX	XXX

**PROJECT NAME AND NUMBER
STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS
FOR THE YEAR ENDED DECEMBER 31, 200X**

		200X Budget	200X Actual	Variance
	Notes	Local currency XXX	Local currency XXX	Local currency XXX
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 CREDIT			
1	AAA	XXX	XXX	XXX
2	BBB	XXX	XXX	XXX
3	CCC	XXX	XXX	XXX
4	DDD	XXX	XXX	XXX
5	EEE	XXX	XXX	XXX
6	GGG	XXX	XXX	XXX
7	HHH	XXX	XXX	XXX
8	LLL	XXX	XXX	XXX
		XXX	XXX	XXX
	Government Funds			
1	AAA	XXX	XXX	XXX
2	BBB	XXX	XXX	XXX
	TOTAL	XXX	XXX	XXX
	TOTAL PROJECT EXPENDITURES	XXX	XXX	XXX
	Surplus/Deficit for the period	XXX	XXX	XXX

The excess/deficit of actual expenditures over the Budget of X% was due to....

**PROJECT NAME AND NUMBER
STATEMENT OF SPECIAL ACCOUNT ACTIVITIES
FOR THE YEAR ENDED DECEMBER 31, 200X**

Account No: _____
Bank: _____
Address: _____

		USD (or as otherwise denominated)	Local Currency Equiv
Opening Balance	Notes	XXX	XXX
Add:			
IFAD Replenishments:			
Date	WA No	XXX	
Date	WA No	XXX	
		<u>XXX</u>	
Bank Interests		XXX	XXX
Total		<u>XXX</u>	<u>XXX</u>
Deduct:			
Transfers to Operating Accounts:			
Date		XXX	
Date		XXX	
		<u>XXX</u>	
Bank Charges		XXX	XXX
Exchange Rate Difference		XXX	XXX
Closing Balance as at 31/12/200X		<u>XXX</u>	<u>XXX</u>

(as per Bank Statement)

Include reconciliation with IFAD records

**PROJECT NAME AND NUMBER
STATEMENT OF SPECIAL ACCOUNT RECONCILIATION
FOR THE YEAR ENDED DECEMBER 31, 200X**

Account No: _____

Bank: _____

Address: _____

		USD (or as otherwise denominated)	Local Currency Equiv
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 31/12/200X	XXXX	XXXX
5	Plus amounts claimed but not yet credited as at 31/12/200X:		
	WA	XXX	Date
	WA	XXX	Date
		XXX	
		XXXX	XXXX
Plus amounts withdrawan not yet claimed, composed of:			
Was Prepared not yet submitted:			
	WA	XXX	
	WA	XXX	
		XXX	
Was not yet prepared:			
		XXX	
6	Total amount withdrawan not yet claimed	XXXX	XXXX
7	Less Interest earned and/or plus Bank charges (if included in the Special Account)	XXXX	XXXX
8	Total Special Account Advance as at 31/12/200X	XXXX	XXXX
8	Difference between Line 3 and line 8	XXXX	XXXX

Notes:

**PROJECT NAME AND NUMBER
SOEs-WITHDRAWAL APPLICATION STATEMENT
FOR THE YEAR ENDED DECEMBER 31, 200X
by Category of Expenditures in Local Currency**

Notes	Category description	Category description	Total	In USD Equivalent	Rejected from IFAD	Net Reimbursed
Cat No	1	2				
WA No:						
	XXX	XXX	XXX	XXX	XXX	XXX
	XXX	XXX	XXX	XXX	XXX	XXX
	XXX	XXX	XXX	XXX	XXX	XXX
	XXX	XXX	XXX	XXX	XXX	XXX
Total						XXX
WA Pending for Submission:						
WA No:	XXX	XXX	XXX	XXX	XXX	XXX
	XXX	XXX	XXX	XXX	XXX	XXX
						XXX
TOTAL	XXX	XXX	XXX	XXX	XXX	XXX

Withdrawal Applications are submitted for reimbursement to IFAD using the historical exchange rate of the transfers to the Operating Account

Expenditures rejected by IFAD (if any) should be detailed here.

This statement should be reconciled with the Statement of Receipts and Payments and include reconciliation with IFAD records

PROJECT NAME AND NUMBER

NOTES TO THE FINANCIAL STATEMENTS

FOR THE YEAR ENDED DECEMBER 31, 200X

1. 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**

2 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

Cash receipts and payments arising from transactions in a foreign currency are recorded in the financial statements using the average rate of exchange. 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 Special Account Activities.

3 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

4 CASH/FUND BALANCES

Reconciliation

	200X Loc currency	200X-1 Loc currency
Cash Accounts	XXX	XXX
Advances	XXX	XXX
	XXX	XXX

4-a CASH DETAILS

	200X Loc currency	200X-1 Loc currency
A/c No _____ Project Operating Account	XXX	XXX
A/c No _____ IFAD Designated Account (as per DA Statement)	XXX	XXX
Petty cash	XXX	XXX
	XXX	XXX

5 DIRECT PAYMENTS

These payments were made directly by IFAD from the Loan account to the specified supplier/service provider in accordance with the terms and conditions of the financing Agreement

Include here details of direct payments

WA, Date, currency and amount received, amount in local currency

6 GOVERNMENT COUNTERPART FUNDS

Details here. Cumulative contributions, yearly contributions (compared to budget). Include details of counterpart contributions as tax exemption.

Include details of tax treatments.

7 OTHER DONOR FUNDS

200X Loc	200X-1 Loc
---------------------	-----------------------

currency	currency
----------	----------

List of Donors

XXX	XXX

Add details of cumulative and expected contributions

8 OTHER RECEIPTS

200X	200X-1
Loc	Loc
currency	currency

**Interest Income
other income (specify)**

XXX	XXX

9 NON-CURRENT ASSETS

Financial Statement Currency

	Cat 1 -		Cat 2 Vehicles		Cat 3-	
	Infrastructure				Equipment	
	200X	200X-1	200X	200X-1	200X	200X-1
Opening Balance	XXX	XXX	XXX	XXX	XXX	XXX
Additions (Statement of Receipts and Payments)	XXX	XXX	XXX	XXX	XXX	XXX
Disposals	XXX	XXX	XXX	XXX	XXX	XXX
Closing Balance	XXX	XXX	XXX	XXX	XXX	XXX

This schedule includes all assets acquired from the commencement of the Project. These assets are stated at cost. Existence and beneficial ownership to be verified by the auditors.

Apart of the summary schedule, details schedules for yearly changes to be included.

10 YEARLY PROCUREMENTS

Include here a list of the yearly procurements including methods

Chapter 9: Project Procurement

400. A detailed procurement plan covering a period of 18 months is prepared and attached as table A (for Civil Works) and table B (for Services).
401. The main items of goods to be procured for project are office and technical equipment and furniture. Other goods and materials will be procured following the local shopping (LS) as appropriate. Civil works will involve the improvement of rural infrastructure, including irrigation and drinking water supply facilities and village roads. They will be procured by using NBF and LCB or LS, depending on the nature of expenditure and the estimated value of the related contract. Technical services, training, workshops and studies for the project will be procured by using Direct Contracting or NBF method. .
402. The following Table presents a summary of the procurement methods. Figures in parenthesis are the respective amounts financed by IFAD.

China H2RDP Design mission		Procurement Method (US\$ '000)			Community Participation in		
Procurement Arrangements		Local Competitive Bidding	Local Shopping	Direct Contracting	Procurement	N.B.F.	Total
A. Procurement accounts							
1. works		-	-	-	-	53,569	53,569
2. Smart civil work		12,083 (12,083)	-	-	-	3,302	15,385 (12,083)
3. Equipment & Materials		-	340 (340)	-	-	-	340 (340)
4. Training and workshop		-	4,627 (4,627)	-	-	5,228	9,855 (4,627)
5. Goods, services and inputs		-	-	-	7,352 (7,352)	142	7,494 (7,352)
6. Grants and subsidies		-	-	55,976 (34,509)	-	22,519	78,495 (34,509)
7. Salaries and allowances		-	-	-	-	2,605 (860)	2,605 (860)
8. Operating costs		-	-	-	-	5,194 (427)	5,194 (427)
9. Operations and maintenance		-	-	-	-	36	36
Total		12,083 (12,083)	4,967 (4,967)	55,976 (34,509)	7,352 (7,352)	92,595 (1,288)	172,974 (60,199)

Note: Figures in parenthesis are the respective amounts financed by IFAD

403. Procurement of goods, works and services financed by the project will be carried out in accordance with the Procurement Law of the People's Republic of China (2002) and its amendments to the extent that they are consistent with the provisions of

IFAD's Project Procurement Guidelines²⁸ and Handbook (2010) and its amendments. The procurement methods to be applied, prior review arrangements, and the thresholds for different procurement methods will depend on the expenditure and the estimated value of the contract and will be detailed in the letter to the borrower.

404. Procurement Plan and AWPB should be submitted through the NOTUS ("No Objection Tracking Utility System (NOTUS)") for IFAD's 'No Objection' and tracking purpose. An IFAD Procurement Plan template will be provided to the project management to guide its preparation of the first procurement plan, which shall include as a minimum:

- a. A brief description of each procurement activity to be undertaken during the period by each and every Project Party;
- b. The estimated value of each procurement activity;
- c. The method of procurement or selection to be adopted for each activity; and
- d. A reference to the AWPB;
- e. An indication as to whether the Fund shall carry out prior or post review in respect of each and every procurement activity.

Any amendments to the Procurement Plan shall be processed through NOTUS and be subject to the Fund's 'No Objection'.

405. The following procurement methods are recommended:

i. Works:

- (i) Competitive Bidding: applies to any procurement of works valued over RMB 1,400,000; and
- (ii) Shopping: applies to any procurement of works valued over RMB 140,000 and upto and including RMB 700,000
- (iii) Direct Contracting: applies to any procurement of works valued upto and including RMB 140,000
- (iv) Force Account method: applies to any procurement of works valued below RMB 700,000

ii. Goods

- (i) Competitive Bidding: for contracts valued over RMB 700,000; and
- (ii) National Shopping: applies to contracts valued over RMB 140,000 and upto and including RMB 700,000

²⁸ IFAD Project Procurement Guidelines -

https://www.ifad.org/documents/38711624/39421027/procure_e.pdf/e1a99511-d57d-4695-a05b-3d9b597d0149.

- (iii) Direct contracting: applies to any procurement of goods valued below and including RMB 140,000

iii. Procurement of consultancy services, shall be undertaken selected in accordance with any one of the competitive selection methods as per the IFAD Project Procurement Guidelines and its Project Procurement Handbook as listed below:

- i. Quality and Cost Based Selection (QCBS)
- ii. Fixed Budget Selection (FBS)
- iii. Least Cost Selection (LCS)
- iv. Consultants Qualification Selection (CQS)

1. The standard selection methods could be applied unless otherwise approved. The following processes will apply:

- i. QCBS or FBS or LCS or CQS for procurement valued over RMB140,000
- ii. Single Source Selection (SSS): procurement valued below and including RMB 140,000. All SSS above RMB 140,000 which will only be accepted with due justification and/or in exceptional cases with prior consultation with IFAD.

406. **Grant and Subsidy.** The project will provide technical and financial support as an incentive to selected cooperatives to stimulate them to establish inclusive and fair relationship with the project target group. Practically, the project will co-finance competitively-selected business plans as a means to efficiently allocate public resources to cooperatives or enterprise-cooperative joint ventures to promote the inclusion of the project target group in sustainable and profitable value chains through mutually beneficial contractual arrangements. The selection of the business plans will be on a competitive basis and will be based on selecting criteria, including: (i) project target group outreach; (ii) definition of fair and sustainable contractual arrangements with the project target group; and (iii) viability and sustainability of the proposal, among other criteria to be elaborated and approved in the Project Implementation Manual. When the BPs are reviewed by a Technical Advisory Group (TAG) and approved, there would be a standard agreement between the project and the company or cooperative that submitted the BP on the financing of the BP. The Project then finances the BPs approved by the County PLG/PMO and the cooperative or companies (as third parties) would undertake the procurement. Such procurements by third parties are not subject to IFAD prior review and they would not be reflected in the project's procurement plan. However, if the amount for reimbursement exceeds the established SOE thresholds, when seeking Withdrawal Application from IFAD the same requirement for supporting document would apply.

407. **Standard Bidding Documents & Standard Contract:** Standard Bidding Documents are of paramount importance for transparency, efficiency, competitiveness and creation of capacity (standardization of procedures). The project should apply the standard bidding documents adapted for IFAD China Project for all national competitive bidding procurements. Similarly, standard contracts for procurement of goods and services for the project shall be developed and applied by the Project. The Project will specify the use of these standard documents in the PIM. Once the standard bidding documents from IFAD are made available, the project will then follow those templates.
408. **Review of Procurement Decisions by IFAD:** In accordance with Section G paragraph 66 of the 2019 IFAD Project Procurement Guidelines, IFAD will undertake to review the provisions for the procurement of good, works and services to ensure that the procurement process is carried out in conformity with the IFAD Project Procurement Guidelines, and the following table defines the prior review required by the Fund:

Procurement Method	Prior ²⁹ or Post	Comments
Competative Bidding Civil Works	Prior	All procurement costing above RMB 7,000,000, and the 1 st procurement of the county during the first 24 months, and
Competative Bidding Goods and Non Consulting Services	Prior	All procurement costing above RMB RMB 1,400,000
Shopping Goods, Civil Works and Non Consultancy Services	Post	All procurement
Direct Contract for Goods, Civil Work and Non Consultancy Services	Prior	All procurement costing above RMB 140,000
Works by Force Account	Post	All procurement
Quality- and Cost-Based Selection (QCBS), Fixed Budged Selection (FBS), Least Cost Selection (LCS) and Consultants Qualification Selection (CQS)	Prior	All procurement valued above RMB 700,000
Sole Source Selection (SSS) and Partnership Agreement with CAAS	Prior	All procurement valued above RMB 140,000
Individual Consultant Selection	Post	All procurement
Competitive Selection Process	Prior	All Business Plan Proposals costing above RMB 2,000,000 of loan resources
Non Competitive Selection (Single	Prior	All Business Plan Proposals costing above

²⁹ All procurement estimated to cost below prior review threshold is subject to post review unless as otherwise stated.

Procurement Method	Prior ²⁹ or Post	Comments
Source)		RMB 140,000 of loan resources

The afore mentioned thresholds may be modified by IFAD during the course of Project implementation.

409. To facilitate prior review by IFAD of procurement decisions for the award of any contract for goods, civil works, and consultancy services under the Project by IFAD, the following documents should be submitted in electronic copies through NOTUS, acceptable in Chinese language.

a. Procurement of civil works, goods, and non consultancy service

i. Bid Document

ii. Evaluation Report and Recommendation for Award which includes but not limited to the following details:

- (a) receipt and opening of bids was conducted in accordance with established rules and procedures;
- (b) examination of bids;
- (c) identification and rejection of substantially non-responsive bids;
- (d) correction of arithmetical errors and currency conversion;
- (e) adjustment for non-material deviations;
- (f) evaluation of bids in accordance with the provision of the bid;
- (g) comparison of bids;
- (h) identification of the lowest evaluated responsive bid;
- (i) post-qualification and award recommendation; and

iii. Draft contract and its amendments.

b. Procurement of consultancy services

i. Request for Expression of Interest (REOI)

ii. Request for Proposal (RFP)

iii. Technical evaluation report which includes but limited to the following details:

- (a) description of the main events in the selection process (advertising, establishment of the shortlist, expressions of interest, withdrawals of firms before proposal submissions, delays, complaints from firms, extension of proposal submission date, etc.);

- (b) brief description of meetings and actions taken by the evaluation committee;
 - (c) analysis of strengths and weaknesses of each proposal in relation to the evaluation criteria;
 - (d) summary of the results of the technical evaluation (including detail of scores);
 - (e) annexes detailing technical scores/ranking given to each firm on each evaluation criterion and scores given by each individual member of the evaluation committee;
 - (f) award recommendation;
- iv. Combined (technical and financial) evaluation report and the recommendation for award which includes but not limited to the following details:
- (a) an account of adjustments made to the prices of the proposals;
 - (b) correction of arithmetic errors;
 - (c) currency conversion;
 - (d) adjustment for nonmaterial deviations;
 - (e) determination of the evaluated price;
 - (f) the award recommendation;
 - (g) an annex with the minutes of the public proposals opening;
- and
- v. Minutes of contract negotiations, draft contract, and contract amendments.

410. Grant and Subsidy Business Plan Proposals shall be subject to IFAD prior and post reviews in order to ensure strategic alignment of project implementation with its objectives. Business Plan Proposals that demand for support of project resources exceeding an amount of RMB 2 million shall be subject to IFAD prior review, after County PLG/PMO approval however prior to the signature of the agreement by the parties to the agreement. The documents to be submitted for prior review include:

- a) Detail Business Plan Proposal
- b) TAG review minutes (including among others TAG composition, review process, and recommendation)
- c) The minutes of negotiations and draft negotiated agreement.

411. Requests for IFAD prior review and no objection, should be routed through NOTUS. The No Objection Utility System (NOTUS) as an integrated system in ICP enforces a step-by-step documentation of the workflow for the process for the entire procurement process (expression of interest, IFAD No-Objection, to contract signature) according to the type (e.g. national competitive bidding, international competitive bidding) and object of procurement (e.g. civil works, goods, services).

NOTUS also has function as tracking system for non-procurement workflow (e.g. Project Implementation Manual – PIM). The Grant and Subsidy Business Plan Proposals should be submitted through NOTUS as Non Procurement work flow uploading the related supporting documentation.

412. All contracts must be periodically updated in ICP-Contracting Monitoring, which aims to capture contract data related to a project directly from the project source. This data will feed dashboards, which facilitate transparency, efficiencies in project performance monitoring, and enhanced reporting in reference to project financed contracts. The data will also enable projects to generate the contract register as per the requirement of the Loan Disbursement Handbook (LDH).

Table A: Procurement Plan for first 18 Months (Civil Works)

国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2021 年度项目采购计划汇总表 (工程类) 18 month Procurement Plan (Civil Works)										
采购计划表1/2 PP Table 1/2										
合同编号Contract number	合同内容Contract contents	单位 Unit	估计数量 Amount Estimated	预算成本 (人民币千元) Budget (CNY' 000)	预算成本 (美元千元) Budget (US\$' 000)	采购方式 Procure methods	是否前审 (Y/N) prior review	预计执行期限 Expected execution period	采购组织单位 organization	备注notes
合计Total										
土建类合计Civil works				13,940.42	1,985.81					
A. 气候智能基础设施发展Climate Smart Irrigation Infrastructure										
1. Irrigation facilities 灌溉设施										
AB-GC-21-XXX	灌溉渠道 Irrigation Canal	km 公里	33.8	8,340.55	1,188.11	NCB	Y	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	压力管道 Pressure pipelines	个 set	30	4,030.09	574.09	NCB	Y	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	水源控制系统 Head control and system	个 set	2,003	527.53	75.15	NCB	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	Culverts 管道	亩 mu	26	151.27	21.55	NCB	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	Retaining dam 拦水坝	公里 km	17	516.23	73.54	NCB	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	Aqueduct 引水渠/桥	座 set	7	159.47	22.72	NCB	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	Sluices水闸	公里 km	20	126.63	18.04	NCB	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	Bridges, canal crossing structures 桥涵	套 set	12	88.65	12.63	NCB	N	2021.1 - 2021.12	实施机构 Agency	Implementing
2. Water supply facilities 饮水设施										
AB-GC-21-XXX	Pumping stations 泵站	site 个	6	626	89	LS	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	水塘 Water ponds	site 个	29	2,887.89	411	LS	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	水窖 Water cellar	site 个	25	117.55	17	LS	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-GC-21-XXX	水池 Water pool	site 个	122	4810	685	LS	N	2021.1 - 2021.12	实施机构 Agency	Implementing
3. Drainage ditches										
AB-GC-21-XXX	Drainage ditches 排水沟	公里 km	8.2	2318	330	LS	N	2021.1 - 2021.12	实施机构 Agency	Implementing
工程类采购合计 Works Total										
2. 货物类采购 Goods and Inputs										
AB-HW-21-XXX	孵化中心设备 Facilities for Incubation Center	批 lot	4	987	141	LS	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-HW-21-XXX	天气监测预报的设备 Monitoring and early warning systems for Climate services	套 set	16	1166	166	LS	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-HW-21-XXX	其它农业农村服务的物品投入 Inputs for other rural services	批 lot	10	2026	289	LS	N	2021.1 - 2021.12	实施机构 Agency	Implementing
AB-HW-21-XXX	项目办设备 PMO equipment	套 set	10	2390	340	LS	N	2021.1 - 2021.12	县项目办 CPMO	
备注: 1、工程类合同编号为: AB县-GC-年份+序号(序号为001开始, 依此类推), 例如石门工程第一合同编号为SM-GC-21-001Note for numbering										
2、货物类合同编号为: AB县-HW-年份+序号(序号为001开始, 依此类推), 例如石门货物第一合同编号为SM-HW-21-001										

Table B: Procurement Plan for first 18 Months (Services)

国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2021 年度项目采购计划汇总表（咨询服务类）18 month Procurement Plan (Services)							
采购计划表2/2 PP Table 2/2							
合同编号 Contract No.	任务描述 Activities	预算成本 (人民币千元) Budget (CNY' 00)	预算成本 (美元千元) Budget (US\$' 000)	选择方式 Method	Prior Review 是否前审 (Y/N)	合同预期 Executing Period 执行期	组织采购单位 Organizing party
咨询类 Consultancy		7928.00	1129.34				
AB-ZX-21-XXX	孵化中心技术支持 TA for incubation centers	6367.00	906.98	CQS	N	2021.1 - 2021.12	Incubation Center 孵化中心
AB-ZX-21-XXX	孵化中心组织的培训 Training by Incubation Centers		0.00	CQS	N	2021.1 - 2021.12	Incubation Center 孵化中心
AB-ZX-21-XXX	妇女青年创业培训辅导 Coaching/training for youth/women		0.00	CQS	N	2021.1 - 2021.12	Implementing Agency 实施机构
AB-ZX-21-XXX	Climate related TA 天气变化的服务 技术援助	292.00	41.60	CQS	N	2021.1 - 2021.12	Implementing Agency 实施机构
AB-ZX-21-XXX	防疫相关的专家服务 TA for Epidemic mitigation measures	273.00	38.89	CQS	N	2021.1 - 2021.12	Implementing Agency 实施机构
AB-ZX-21-XXX	其它服务相关的技术支持 TA for other services	454.00	64.67	CQS	N	2021.1 - 2021.12	Implementing Agency 实施机构
AB-ZX-21-XXX	项目办技术咨询 TA for PMOs	542.00	77.21	CQS	N	2021.1 - 2021.12	县项目办 CPMO
AB-ZX-21-XXX							
服务类 Service		2764.00	393.73			2021.1 - 2021.12	
AB-FW-21-XXX	项目基线调查 Baseline Survey	200.00	28.49	QCBS	Y	2021.1 - 2021.12	省县项目办 PPMO/CPMO
AB-FW-21-XXX	监测评价服务 M&E service	1134.00	161.54	LC	N	2021.1 - 2021.12	县项目办 CPMO
AB-FW-21-XXX	管理信息系统开发MIS Development	800.00	113.96	QCBS	Y	2021.1 - 2021.12	省/县项目办 PPMO/CPMO
AB-FW-21-XXX	地方工作人员培训 Local staff training	240.00	34.19	LC	N	2021.1 - 2021.12	县项目办 CPMO
AB-FW-21-XXX	国内培训 Domestic training	390.00	55.56	LC	N	2021.1 - 2021.12	县项目办 CPMO
AB-FW-21-XXX	国内考察 Domestic Study tour						
AB-FW-21-XXX	妇联相关的能力建设活动 WF related training and and capaticy building	50.00	7.12	LC	N	2021.1 - 2021.12	县项目办/妇联 CPMO/WF
合计Total		10,692.00	1,523.08				
备注: 1、咨询类合同编码为: AB县-ZX-年份+序号(序号为001开始, 依此类推), 例如石门土建第一合同编码为SM-ZX-21-001Note for numbering							
2、服务类合同编码为: AB县-FW-年份+序号(序号为001开始, 依此类推)							

Table: C First Annual Work Plan and Budget (AWPB- 2021); (Component A- Inclusive Private Sector Investment Models)

表Table 1: 国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2021 AWPB by Component 项目实施与投资费用计划汇总表 (Component A 子项一)															
报告单位: 湖南省项目办 By Provincial PMO			报告日期: 2020年6月15日					Unit 单位: 千元 '000 CNY							
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben	Ope		Total
农发	政府	受益人	经营主体	合计	农发	政府	受益人	经营主体	合计						
A. Inclusive Private Sector Investment Models 包容性私营部门投资模式															
A.1	Inclusive rural business development 包容性产业发展														
	1. Business Plan for New Economic Entities 新型经营主体商业计划	份each	236.00	211,453.0	158082		143,003.0	512,538.0	80.00	69,990.0	52,325.0	-	47,334.0	169,649.0	33%
	2. Start up financing for youth/women 年轻人妇女创业资金	份each	317.00	30,799.0			7,700.0	38,499.0	104	9,862.0	-	-	2,466.0	12,328.0	32%
	A.1 小计 Subtotal		242,252.0	158,082.0	-	150,703.0	551,037.0		79,852.0	52,325.0	-	49,800.0	181,977.0	33%	
A.2	Rural business development services 产业发展与农村事务服务														
A.2-1	Agri-business development 经营主体发展			35,592.0	-	-	-	35,592.0							
	a) Business incubation / Service centres 孵化中心			32,906.0	-	-	-	32,906.0		7,354.0	-	-	-	7,354.0	22%
	1 Setting up 中心建立	个 Center	10.00	2,506.0				2,506.0	4	987				987.0	39%
	2 Tech assistance to service centers 对中心的技术支持	批次 lot	50.00	16,155.0				16,155.0	20.0	6,367.0				6,367.0	39%
	3 Technical to clients of various needs 对客户的技术服务	批次 lot	50.00	6,227.0				6,227.0						-	0%
	4 Review and support of Business Plan 商业计划审核	lumpsum 年批	50.00	8,018.0				8,018.0						-	0%
	b) Youth and women business capacity building 对年轻人和妇女的创业能力建设			140.00	2,686.0	-	-	2,686.0						-	0%
	1 Mentoring of start up candidates 辅导和培训		140.00	2,686.0				2,686.0						-	0%
A.2-2	Inclusive rural service			18,023.0	1,800.0	-	-	19,823.0		4,503.0	-	-	-	4,503.0	23%
	a) Climate smart services 智慧型天气服务			120.0	3,700.0	1,800.0	-	5,500.0	32.0	1,458.0	-	-	-	1,458.0	27%
	1 Monitoring and early warning systems 监测和预报系统	个 each	40.00	2,960.0				2,960.0	16.0	1,166.0				1,166.0	39%
	2 Capacity building and technical services 能力建设和技术服务	个 each	40.00	740.0				740.0	16.0	292.0				292.0	39%
	3 Climate related insurance 气候相关的保险服务	个 each	40.00		1,800.0			1,800.0						-	0%
	b) Epidemic prevention and mitigation (SARS-CoV-2) 传染病防控			60.0	1,013.0	-	-	1,013.0	30.0	565.0	-	-	-	565.0	56%
	1 Developing guidelines 开发指南和手册	lumpsum	10.00	273.0				273.0	10.0	273.0				273.0	100%
	2 Providing expert assessment and design risk mitigation measures 防控的评估和措施设计	个 each	50.00	740.0				740.0	20.0	292.0				292.0	39%
	c) Other Production and rural services 其它服务			102.0	13,310.0	-	-	13,310.0	20.0	2,480.0	-	-	-	2,480.0	19%
	1 Inputs 必要的投入物支持	lumpsum	51.00	10,874.0				10,874.0	10.0	2,026.0				2,026.0	19%
	2 Provision of collective services 服务的提供支持	lumpsum	51.00	2,436.0				2,436.0	10.0	454.0				454.0	19%
	A.2 小计 Subtotal			53,615.0	1,800.0	-	-	55,415.0		4,503.0	-	-	-	4,503.0	8%

表Table 1:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2021 AWPB by Component 项目实施与投资费用计划汇总表 (Component A 子项一)

报告单位: 湖南省项目办 By Provincial PMO		报告日期: 2020 年6 月15 日					Unit 单位: 千元 '000 CNY								
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier				占目标%		
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben		Ope	Total
				农发	政府	受益人	经营主体		合计	农发	政府	受益人		经营主体	合计
A、Inclusive Private Sector Investment Models 包容性私营部门投资模式															
A.3	Recurrent Costs														
	a) Staff salary 员工工资			6,040.0				6,040.0	1,208.0	-	-	-	1,208.0	20%	
	1. Staff salary 员工工资	人/年	100.00	6,040.0				6,040.0	20.00	1,208.0			1,208.0	20%	
	b) Other operating costs 其他运行费用			3,000.0	3,000.0	-	-	6,000.0	600.0	600.0	-	-	1,200.0	20%	
	Rental expenditure 租赁费用	office year 办公室/年	50.00		3,000.0			3,000.0	10.00		600.0		600.0	20%	
	Office operating costs 办公室运行费用	office year 办公室/年	50.00	3,000.0				3,000.0	10.00	600.0			600.0	20%	
	小计 Subtotal			9,040.0	3,000.0	-	-	12,040.0	1,808.0	600.0	-	-	2,408.0	20%	
A.4	Professional Farmer Training 职业农业培训														
	a) Number of trainees 接受培训人数														
	Number of incremental training 增加人数		5000.00	10,529.0				10,529.0	1,000.0	2,003.0			2,003.0	19%	
	b) Proportion of women trainees 接受培训者女性占比														
	Incremental trainees 女性增加人数		2068.00	2,905.0				2,905.0	249.0	330.0			330.0	11%	
	c) Average age of trainees 接受培训者平均年龄														
	Reduction in age of trainees 减少的平均年龄		71476.00	5,013.0				5,013.0	71,476.0	528.0			528.0	11%	
	小计 Subtotal			18,447.0	-	-	-	18,447.0	2,861.0	-	-	-	2,861.0	16%	
	Total Component A A部分合计			323,354.0	162,882.0	-	150,703.0	636,939.0	89,024.0	52,925.0	-	49,800.0	191,749.0	30%	

Table: D First Annual Work Plan and Budget (AWPB- 2021); (Component B- Climate-Proofed Public Infrastructure Planning, Development & Improvement)

表Table 2: 国际农发基金贷款湖南乡村振兴示范项目 H2RDP 2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component B 子项二)																
报告单位: 湖南省项目办 By Provincial PMO			报告日期: 2020年6月15日					Unit 单位: 千元 '000 CNY								
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划								
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier						占目标%
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope	Total		
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计		
B、支持应对气候变化的公共基础设施规划与建设 Climate-proofed public infrastructure planning, development and improvement																
B.1	Climate Smart Irrigation Infrastructure 气候智能基础设施发展															
	1. Irrigation facilities 灌溉设施			44,509.3	10,672.9			55,182.3		12,332.3	1,608.1			13,940.4 25%		
	Irrigation canal 灌溉渠道	km	124.6	24,841.8	8,844.8			33,686.6	33.8	7,062.5	1,278.0			8,340.6 25%		
	Pressure pipeline 输水压力管道工程	个 set	100.0	13,872.4	49.2			13,921.6	29.5	4,022.2	7.9			4,030.1 29%		
	Head control and system 水源控制系统	个 set	7,521.0	2,019.8	18.9			2,038.8	2,003.0	523.0	4.6			527.5 26%		
	Culvert 涵洞	亩 mu	137.0	433.8	184.3			618.2	26.0	125.8	25.5			151.3 24%		
	Retaining dam 拦水坝	公里 km	82.0	1,300.9	1,326.9			2,627.8	17.0	258.6	257.6			516.2 20%		
	Aqueduct 渡槽	座 set	30.0	708.9				708.9	7.0	159.5				159.5 22%		
	Sluice 水闸	公里 km	141.0	908.3	32.3			940.6	20.0	122.2	4.4			126.6 13%		
	Bridges, canal crossing structures 桥涵	套 set	83.0	423.3	216.5			639.9	12.0	58.6	30.1			88.7 14%		
	2. Water source facility 水源			26,308.3	-	-	-	26,308.3		8,441.3	-	-	-	8,441.3 32%		
	Pumping station 泵站	site	23.0	2,476.8				2,476.8	6.0	626.1				626.1 25%		
	Water pond 水塘	site	110.0	11,261.0				11,261.0	29.0	2,887.9				2,887.9 26%		
	Water cellar 水窖	site	50.0	238.0				238.0	25.0	117.6				117.6 49%		
	Water pool 蓄水池	site	306.0	12,332.4				12,332.4	122.0	4,809.8				4,809.8 39%		
	3. Drainage ditch 排水渠			14,007.0	5,890.0	-	-	19,897.0		2,318.0	3,527.0	-	-	5,845.0 29%		
	Drainage ditches 排水渠	公里 km	47.6	14,007.0				14,007.0	8.2	2,318.0				2,318.0 17%		
	Drainage ditches, GOC 排水渠-政府	公里 km	3.3		5,890.0			5,890.0	2.0		3,527.0			3,527.0 60%		
	B.1 Subtotal 小计			84,824.6	16,562.9	-	-	101,387.6		23,091.7	5,135.1	-	-	28,226.8 28%		

表Table 2:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component B 子项二)

报告单位: 湖南省项目办 By Provincial PMO		报告日期: 2020年6月15日		Unit 单位: 千元 '000 CNY											
序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier					占目标%	
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben	Ope		Total
				农发	政府	受益人	经营主体		合计	农发	政府	受益人	经营主体		合计
B、支持应对气候变化的公共基础设施规划与建设 Climate-proofed public infrastructure planning, development and improvement															
B.2	Public Rural infrastructure 公共基础设施														
	1. Rural roads 农村道路			-	233,863.5	-	-	233,863.5		-	55,534.6	-	-	55,534.6	24%
	Village road村道	公里 km	193.7		89,628.0			89,628.0	55.2		24,710.2			24,710.2	28%
	Production road生产路	公里 km	208.0		66,009.3			66,009.3	47.0		14,358.5			14,358.5	22%
	Earth road田间道	公里 km	191.7		78,226.1			78,226.1	41.9		16,466.0			16,466.0	21%
	2. Drinking water supply 饮水工程			-	22,206.8	-	-	22,206.8		-	9,329.2	-	-	9,329.2	42%
	Water pipeline 输水管道	公里 km	89.6		15,156.9			15,156.9	40.6		6,727.4			6,727.4	44%
	Water source engineering	work	85.0		7,049.9			7,049.9	32.0		2,601.8			2,601.8	37%
	3. Power supply system 供电系统			-	1,347.3	-	-	1,347.3		-	1,027.9	-	-	1,027.9	76%
	Electricity cable line 电力线	公里 km	12.0		880.3			880.3	9.0		656.1			656.1	75%
	Transformers 变压器	each	5.0		467.1			467.1	4.0		371.8			371.8	80%
	4. Land preparation 土地平整	公顷ha	1451		50,429.6			50,429.6	287.0		9,563.3			9,563.3	19%
	5. Environmental improvements 环境治	lumpsum			68,204.0			68,204.0			12,901.0			12,901.0	19%
	B.2 Subtotal 小计			-	376,051.2	-	-	376,051.2		-	88,356.0	-	-	88,356.0	23%
B.3	Recurrent Cost														
	O&M 设施管护	lumpsum	121.0		3,025.0	3,025.0		6,050.0	39.0		975.0	975.0		1,950.0	32%
	Beneficiary training 管护能力培训	per year	1,937.0		145.3	145.3		290.6	453.0		34.0	34.0		68.0	23%
	B.3 Subtotal 小计			-	3,170.3	3,170.3	-	6,340.6		-	1,009.0	1,009.0	-	2,018.0	32%
	Total Component B B部分合计				84,824.6	395,784.5	3,170.3	483,779.4		23,091.7	94,500.0	1,009.0	-	118,600.7	25%

表Table 3: 国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component C 子项三)

序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划							
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier					占目标%
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope	Total	
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体	合计	
C. Project Management, M&E, KM and Policy 项目管理、监测评价、知识管理以及政策															
C.2	Prefecture office (Xiangxi) 湘西州项目办														
	1. Equipment and materials 项目办设备	prefecture	-	-	-	-	-	-	-	-	-	-	-	-	
	2. Workshops and training 项目管理研讨会及培训			-	1,400.0	-	-	1,400.0	-	360.0	-	-	360.0	26%	
	Management workshop & training 项目管理研讨会及培训	lumpsum	5.0	-	500.0			500.0	1.0	-	100.0		100.0	20%	
	Gender focus training 性别主题培训	lumpsum	1.0	-	100.0			100.0	1.0	-	100.0		100.0	100%	
	Monitoring & evaluation training 监测评价培训	lumpsum	5.0	-	500.0			500.0	1.0	-	100.0		100.0	20%	
	Agri-business related training 经营主体相关培训	lumpsum	5.0	-	300.0			300.0	1.0	-	60.0		60.0	20%	
	3. Knowledge management events 知识管理活动			-	500.0	-	-	500.0		100.0	-	-	100.0	20%	
	National study tours 国内学习考察	prefecture	5.0	-	250.0			250.0	1.0	-	50.0		50.0	20%	
	Knowledge documents & sharing 知识产品	prefecture	5.0	-	250.0			250.0	1.0	-	50.0		50.0	20%	
	4. Monitoring and evaluation 监测评价			-	250.0	-	-	250.0		-	-	-	-	0%	
	Policy studies 政策研究	lumpsum	4.0	-	250.0			250.0	-	-	-		-	0%	
	C.2 Subtotal 小计			-	2,150.0	-	-	2,150.0	-	-	460.0	-	-	460.0	21%

表Table 3:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component C 子项三)

序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划						占目标%	
			规模 Number	投资费用 Financier					规模 Number	投资费用 Budget & Financier					
				IFAD	Gov	Ben	Ope	Total		IFAD	Gov	Ben	Ope		Total
				农发	政府	受益人	经营主体	合计		农发	政府	受益人	经营主体		合计
C. Project Management, M&E, KM and Policy 项目管理、监测评价、知识管理以及政策															
C.3	County PMOs 县项目办														
	1. Office equipment 项目办设备			2,390.0	-	-	-	2,390.0		2,390.0	-	-	-	2,390.0	100%
	Office equipment项目办设备	lumpsum	10.0	2,390.0	-	-	-	2,390.0	10.0	2,390.0	-	-	-	2,390.0	100%
	2. Staff training 员工培训			3,650.0				3,650.0		390.0	-	-	-	390.0	11%
	a) National training 国内培训			1,250.0	-	-	-	1,250.0		290.0	-	-	-	290.0	23%
	Project management training 项目管理培训	pers days	250.0	250.0	-	-	-	250.0	50.0	50.0	-	-	-	50.0	20%
	FM & procurement training 财务采购培训	training	200.0	200.0	-	-	-	200.0	40.0	40.0	-	-	-	40.0	20%
	Gender related training 性别主题培训	pers days	150.0	150.0	-	-	-	150.0	50.0	50.0	-	-	-	50.0	33%
	Environmental safe guard training 环境主题培训	pers days	150.0	150.0	-	-	-	150.0	50.0	50.0	-	-	-	50.0	33%
	Technical training 技术相关培训	pers days	500.0	500.0	-	-	-	500.0	100.0	100.0	-	-	-	100.0	20%
	b) workshops and meetings 研讨会及会议			500.0				500.0		100.0	-	-	-	100.0	20%
	Workshops & meetings 研讨会及会议	event	100.0	500.0	-	-	-	500.0	20.0	100.0	-	-	-	100.0	20%
	c) Project study tours 项目考察学习			1,900.0	-	-	-	1,900.0		-	-	-	-	-	0%
	Study tours within the Province 省内考察	persons	500.0	500.0	-	-	-	500.0	-	-	-	-	-	-	0%
	Outside the Province 省外考察	persons	200.0	1,400.0	-	-	-	1,400.0	-	-	-	-	-	-	0%
	3. TA and short-term staff 技术支持以及短期员工			2,710.0				2,710.0		542.0	-	-	-	542.0	20%
	TA consultants技术顾问	lumpsum	50.0	2,000.0	-	-	-	2,000.0	10.0	400.0	-	-	-	400.0	20%
	Short-term staff 短期员工	pers month	100.0	710.0	-	-	-	710.0	20.0	142.0	-	-	-	142.0	20%
	4. M&E and knowledge management 监测评价以及知识管理			5,670.0	-	-	-	5,670.0	20.0	1,134.0	-	-	-	1,134.0	20%
	Monitoring & evaluation 监测评价	lumpsum	50.0	3,500.0	-	-	-	3,500.0	10.0	700.0	-	-	-	700.0	20%
	Knowledge maanagement 知识管理	lumpsum	50.0	2,170.0	-	-	-	2,170.0	10.0	434.0	-	-	-	434.0	20%
	5. Planning and design 勘察设计			-	24,800.0	-	-	24,800.0	10.0	-	4,960.0	-	-	4,960.0	20%
	Planning and design 勘察设计	lumpsum	50.0	-	24,800.0	-	-	24,800.0	10.0	-	4,960.0	-	-	4,960.0	20%
	C.3 Subtotal 小计			14,420.0	24,800.0	-	-	39,220.0		4,456.0	4,960.0	-	-	9,416.0	24%

表Table 3:

国际农发基金贷款湖南乡村振兴示范项目 H2RDP
2020-21AWPB by Component 项目实施与投资费用计划汇总表 (Component C 子项三)

序号	项目活动 Project Activities	单位 Unit	项目目标 Project Total Budget					2021 Annual Plan 年度计划					占目标%		
			规模 Number	投资费用 Financier				规模 Number	投资费用 Budget & Financier						
				IFAD	Gov	Ben	Ope		Total	IFAD	Gov	Ben		Ope	Total
农发	政府	受益人	经营主体	合计	农发	政府	受益人	经营主体	合计						
C. Project Management, M&E, KM and Policy 项目管理、监测评价、知识管理以及政策															
C.4	Recurrent Costs 运行费用														
	1. PPMO 省项目办			-	4,500.0	-	-	4,500.0	4.0	-	900.0	-	-	900.0	20%
	staff salaries 员工工资	lumpsum	5.0	-	2,000.0			2,000.0	1.0	-	400.0			400.0	20%
	Travel costs 差旅费	year	5.0	-	1,000.0			1,000.0	1.0	-	200.0			200.0	20%
	Office operating costs 办公室运行费	year	5.0	-	1,000.0			1,000.0	1.0	-	200.0			200.0	20%
	Vehicle renting 车辆租赁	year	5.0	-	500.0			500.0	1.0	-	100.0			100.0	20%
	2. Prefecture PMO 州项目办				550.0	-	-	550.0	3.0	-	110.0	-	-	110.0	20%
	Travel costs 差旅费	staff year	5.0	-	250.0			250.0	1.0	-	50.0			50.0	20%
	Office operating costs 办公室运行费	year	5.0	-	50.0			50.0	1.0	-	10.0			10.0	20%
	Vehicle renting 车辆租赁	year	5.0	-	250.0			250.0	1.0	-	50.0			50.0	20%
	3. County PMOs 县项目办				31,569.9	-	-	31,569.9	50.0	-	6,314.0	-	-	6,314.0	20%
	a) Staff salary (3 staff in each county) 员工工资 (每个县3名员工)				9,999.9	-	-	9,999.9	30.0	-	2,000.0	-	-	2,000.0	20%
	Staff salary 员工工资	per annum	150.0	-	9,999.9			9,999.9	30.0	-	2,000.0			2,000.0	20%
	b) Other operating costs 其他运行费用				21,570.0	-	-	21,570.0	20.0	-	4,314.0	-	-	4,314.0	20%
	Vehicle hiring charges 车辆租赁	per year	50.0	-	4,800.0			4,800.0	10.0	-	960.0			960.0	20%
	Office operating costs 办公室运行费	per year	50.0	-	16,770.0			16,770.0	10.0	-	3,354.0			3,354.0	20%
	C.4 Subtotal 小计			-	36,619.9	-	-	36,619.9		-	7,324.0	-	-	7,324.0	20%
	Total Component C C部分合计			14,420.0	72,519.9	-	-	86,939.9	-	4,456.0	15,187.5	-	-	19,643.5	23%

Chapter 10: Environment and Social Management Plan (ESMP)

Objective

413. The objective of the Environmental and Social Management Plan (ESMP) is to make sure that all environmental, social and climate change risks related to the project's activities and investments are properly identified, managed and mitigated. For more details on the risks related to the project, see the full analysis in the SECAP main document. The below table outlines the projects interventions and related risks and mitigation measures, how their effectiveness will be monitored and who will be responsible, and the related budget. This framework shall be finalized as part of the Project Implementation Manual (PIM) at project start up and updated and adjusted as need be during project implementation.

Grievance and Redress Mechanism (GRM)

414. The project will follow IFAD's Complaints Procedure which ensures that appropriate mechanisms are in place to allow individuals and communities to contact IFAD directly and file a complaint if they believe they are or might be adversely affected by an IFAD-funded project/programme not complying with IFAD's Social and Environmental Policies and mandatory aspects of SECAP.
415. IFAD's Grievance and Redress Mechanism shall be fully explained to stakeholders during the programme's start-up workshop and to beneficiaries during the programme's activities. The complainants should first bring the matter to the attention of the County Project Management Offices (PMOs) of the County Agriculture and Rural Development Agencies (CARAs) or the Provincial Project management Office (PPMO) of the Provincial Agriculture and Rural Development Agency (DARA). If the PMOs or PPMO do not adequately respond, the matter may be brought to the attention of IFAD. The issue may also be brought straight to IFAD if the complainants feel they might be subject to retaliation if they bring it first to the PMOs or the PPMO.
416. Grievances shall be addressed at the field level by the project team which will be the first layer of redressal mechanism. If the grievance is not resolved at the field level, it will be escalated to the PPMO and then to IFAD who will be responsible for addressing grievances related to violations of the Programme's SECAP reflecting IFAD's social and environmental policies and standards.
417. As provided by IFAD's Policy on prevention and response to Sexual Exploitation and Abuse (SEA, 2018), all contracts with project personnel, contractors, service providers and other third parties, that are funded with IFAD funds, must include provisions: (i) for prohibiting acts of SEA; (ii) that establish the obligation to immediately report to IFAD or the Government incidents of SEA; and (iii) that establish immediate termination of contract based on proven acts of SEA.
418. Likewise, all contracts with contractors and service providers and other third parties must include provisions for the protection of labour rights and working conditions.
419. All grievances (including reports on SEA and violations of worker rights and conditions) received and action taken to address them will be reported to the relevant PMO, PPMO and

the Steering committee. The PMOs and the PPMO shall ensure that all complaints received and actions taken are included in the progress reports to IFAD.

420. As detailed in the ESMP table below, all infrastructure investments are foreseen to be within IFAD’s environmental and social risk category B. As part of the approval of any concrete infrastructure investment to be financed under the project, the PMOs (monitored by the PPMO) must verify if its dimensions are exceeding the thresholds listed in the table below, which would trigger an environmental risk category A. In the case the thresholds are exceeded IFAD must be contacted before any investments are made to discuss and agree on the environmental and social impact assessments needed and risk mitigation measures to be implemented.

Criteria and thresholds for infrastructure investments that will trigger an environmental and social risk category A

Irrigation	The investment include the construction/ rehabilitation/upgrade of dam(s) and/or reservoir(s) meeting at least one of the following criteria <ul style="list-style-type: none"> - more than 15 metre high wall; - more than 500 metre long crest; - more than 3 million m³ reservoir capacity; or - incoming flow of more than 2,000 m³/s
	The investment involve large-scale irrigation schemes rehabilitation and/or development (more than 100 hectares per scheme) ³⁰
	The investment include drainage or correction of natural waterbodies
	The investment involve significant extraction/diversion/ containment of surface water, leaving the river flow below 20 per cent environmental flow plus downstream user requirements
Roads	The investment include construction/ rehabilitation/upgrade of roads that entail a total area being cleared above 10 km long, or any farmer with more than 10 per cent of his or her private land taken
All infrastructure	The investment will cause significant adverse impacts to habitats and/or ecosystems and their services (e.g. conversion of more than 50 hectares of natural forest, loss of habitat, erosion/other form of land degradation, fragmentation and hydrological changes).
	The investment area include ecologically sensitive areas, ³¹ areas of global/national significance for biodiversity conservation, and/or biodiversity-rich areas and habitats depended on by endangered species
	The investment will result in economic displacement ³² or physical resettlement of more than 20 people, or impacting more than 10 per cent of an individual household’s assets

³⁰ The size threshold to trigger an Environmental and Social Impact Assessment (ESIA) may vary based on the country context and fragility of specific locations. China’s regulations determining size of irrigation development requiring a full ESIA will be adopted where they exist. However, where there are no standards, it is proposed to use 100 hectares as an irrigation development unit size to trigger an ESIA.

³¹ “Sensitive areas” include: protected areas (national parks, wildlife/nature reserves, biosphere reserves) and their buffer zones; areas of global significance for biodiversity conservation; habitats depended on by endangered species; natural forests; wetlands; coastal ecosystems, including coral reefs and mangrove swamps; small island ecosystems; areas most vulnerable to climate change and variability; lands highly susceptible to landslides, erosion and other forms of land degradation, areas that include physical cultural resources (of historical, religious, archaeological or other cultural significance), and areas with high social vulnerability.

³² Economic displacement implies the loss of land, assets, access to assets, income sources, or means of livelihoods.

ESMP- Matrix

Interventions	Social, Environmental & Climate Risks	Mitigating Measure	Monitoring	Responsible Institution	Cost
<i>All interventions</i>	Unmitigated Risks causing adverse impacts on rural people and livelihoods in the project area	<ul style="list-style-type: none"> • Strict application of the Grievance Redress Mechanism (GRM). • Ensure dissemination of the GRM to local communities prior to starting project activities. • Maintain solid documentation for the received complaints during the operation of the project and track the level of responsiveness (provision of feedback). • Swift action and redressal on farmer complaints/apprehensions. 	<ul style="list-style-type: none"> • Quarterly review of the number of complaints received. • Quarterly review of the number of complaints addressed, the mechanisms used and the time it took to address them. 	<ul style="list-style-type: none"> • PMOs and PPMO. If not solved then IFAD. 	<ul style="list-style-type: none"> • \$2,500 (PPMO admin budget)
<i>All interventions</i>	<u>Social:</u> Beneficiary Dissatisfaction and Discrimination	<ul style="list-style-type: none"> • Collect feedback on project performance and beneficiary satisfaction from women and men of various ethnic and age groups, with special representation of vulnerable households, through focus group discussions. • Convey the feedback and actions taken accordingly to beneficiary. 	<ul style="list-style-type: none"> • Annual surveys. • Focus group discussions 	<ul style="list-style-type: none"> • PMOs and PPMO 	<ul style="list-style-type: none"> • \$4,000 (M&E budget)

<p><i>All interventions</i></p>	<p><u>Social:</u> Gender issues and all forms of Gender Based discrimination and exclusion from project benefits and leadership roles.</p>	<ul style="list-style-type: none"> • Inclusive Gender transformative approach is taken in project design • Institutions like Women Federation and Youth league are playing lead role in devising the gender based discrimination and redressing any exclusion of social group • Capacity building and special training will be imparted. • A gender specialist will be in project to monitor the gender related issues and streamline the gender empowerment. Such redressal measures are reflected in TORs. • Project target 50% outreach as women and make sure gender disaggregated target in all project activities. • Pro-WEAI empowerment indicators (production, resources, income, leadership, time) • (PMOs and PPMO to have gender and social inclusion experts and gender balance among their staff. All staff to have minimum gender training. • Achievement of gender quotas for beneficiaries of the various activities (on average at least 50% women), as established in the Logframe and PIM, to be closely monitored. Corrective actions to be promptly taken if falling behind in achieving the targets. • Gender training for men and women raising awareness on gender based discrimination and leadership training 	<ul style="list-style-type: none"> • Quarterly collecting gender disaggregated monitoring and evaluation data to track the extent to which women have been able to participate and benefit from project activities and take leading roles and positions. • Pro-WEAI indicator in baseline survey 	<ul style="list-style-type: none"> • PMOs and PPMO M&E responsible 	<ul style="list-style-type: none"> • Included in M&E budget and \$6,000 (Capacity building budget)
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		for women to be given to members of cooperatives, Water Users Associations (or their likes), and start-ups entrepreneur groups.			
Component A: Supporting Inclusive Rural Development					
<p>Activity A.1.1: Investment Support for Rural Business</p> <p>Activity A.1.2: Business Start-up support for youth and women</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> Women, Youth and vulnerable & ethnic households are not adequately engaged and benefiting from the improved business of New Economic Entities supported by the project <p><u>Environmental:</u></p> <ul style="list-style-type: none"> Increased production with 	<p><u>Social: (PIM chapter 3 attachment 1)</u></p> <ul style="list-style-type: none"> The targeting arrangement will ensure the relatively poor and ethnic concentrated villages will be prioritized; Eligibility and financing rules of the Business Plans to be supported by the project will include requirement and preference for inclusion of poor households and women; The operational standards include criteria for fair benefit sharing of profits. Compliance with the standards will be verified by an independent third party and by IFAD SIS missions; Business plan proposals to include an assessment of all social exclusion and adverse impact risks and proper mitigation measures including measure to ensure inclusion and benefits to women youth and poor and vulnerable households Project have allocated special funds to support the start up business of youth and women <p><u>Environmental: (PIM chapter 3 attachment 2)</u></p>	<ul style="list-style-type: none"> Initial verification and annual follow up verification of compliance with social inclusion standards 	<ul style="list-style-type: none"> Independent third party and PMOs and PPMO 	<ul style="list-style-type: none"> \$5,000 (M&E budget)

	<p>inadequate practices may increase soil erosion, pollution from agrochemicals and waste from processing activities</p>	<ul style="list-style-type: none"> • Business plan proposals to include: 1) an assessment of all environmental risks and mitigation measures related to the agricultural production and eventual processing activities; and 2) documentation of how the investments in production and processing activities will comply with local environmental standards and required certificates • TAG and CPMO to review the environmental risk assessment of the business plans and compliance with IFAD and the governments environmental standards before the approval of the business plan and matching rant • Key environmental and social risk mitigation measures to be included in the Financing Agreement between the agro-entities and the county PMO • Training and technical assistance provided as needed to the cooperative farmers, livestock keepers and to operators and employees of related processing plants in: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and resources use efficiency); and operation of renewable energy technologies. 	<ul style="list-style-type: none"> • Annually monitoring of cooperative’s compliance with environmental and social safeguards including all mitigation measures included in the business plans and financing agreements 	<ul style="list-style-type: none"> • County PMOs with periodic checks by the PPMO 	
<p>Activity A.3 Professional</p>	<p><u>Social:</u></p>		<ul style="list-style-type: none"> • Annually monitoring of 	<ul style="list-style-type: none"> • County PMOs with periodic 	<ul style="list-style-type: none"> • Part of M&E activity.

<p>Farmer Training</p>	<ul style="list-style-type: none"> No social risks identified for this activity <p><u>Environment:</u></p> <ul style="list-style-type: none"> Inadequate inclusion of environmental related knowledge in the training curriculum; Trained farmers do not apply proper measures conducive to environment 	<p><u>Environmental: (PIM chapter 3 attachment 2)</u></p> <ul style="list-style-type: none"> Environmental awareness and environmental friendly measures and technologies will be incorporated in the curriculum; CPMOs and technical agencies in the project counties will undertake follow-up visits to trained farmers on their application of learning from the training, among others. 	<p>Professional Farmer Training program’s compliance with environmental and social safeguards including all mitigation measures.</p>	<p>checks by the PPMO</p>	
<p>Activity A.2.1: Business Incubation Service Center Support</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> Women, youth and vulnerable households are not adequately served by the centers. Biased selection of clientele for the services <p><u>Environmental:</u></p>	<p><u>Social: (PIM chapter 3 attachment 3)</u></p> <ul style="list-style-type: none"> Application of concrete targeting strategies to attract young women to the Business Incubation Service Centers (BISC) in collaboration with the All-China-Women-Federation. Monitor closely the participation of women among the beneficiaries, and take action if below 50%. <p><u>Environmental: (PIM chapter 3 attachment 2)</u></p> <ul style="list-style-type: none"> Curriculum of IC training will include environmental related issues, in additional to business management 	<ul style="list-style-type: none"> Initial verification and annual follow up verification of compliance with social safeguards and inclusion standards 	<ul style="list-style-type: none"> Independent third party and PPMO 	<ul style="list-style-type: none"> \$5,000 (Capacity building budget)

	<ul style="list-style-type: none"> • Business investment plans pay inadequate attention to environmental issues resulting in pollution, wastes and environmental degradation 	<p>such as: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and resources use efficiency); and operation of renewable energy technologies.</p> <ul style="list-style-type: none"> • Advisory and facilitations provided by IC/BS will also cover environmental related aspects and given preference to environmental friendly business opportunities and sub-sectors 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	
<p>Activity A.2.2: Public institution based rural services (i.e Climate services, epidemic prevention and mitigation, land management, pest management and transfer services etc)</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> • Geographic and cognitive constraints preventing certain communities not adequately covered by the services; <p><u>Environmental risks:</u></p> <ul style="list-style-type: none"> • Inadequate application of environmental friendly measures resulting in 	<p><u>Social: (PIM chapter 3 attachment 3)</u></p> <ul style="list-style-type: none"> • Different forms of messages/channels will be employed in communicating information relating to and generated by the project services • Platforms of professional farmer training and other opportunities will be exploited to address the social risks; <p><u>Environmental: (PIM chapter 3 attachment 2)</u></p> <ul style="list-style-type: none"> • There will be a regular : 1) an assessment of all environmental risks and mitigation measures related to the agricultural production and eventual processing activities; and 2) documentation of how the investments in production and processing activities will comply with local environmental standards and required certificates 	<ul style="list-style-type: none"> • Initial verification and annual follow up verification of compliance with social safeguards and inclusion standards <p>Annually monitoring of cooperative’s compliance with environmental and social safeguards including all mitigation measures included in the</p>	<ul style="list-style-type: none"> • PMOs and PPMO 	<p>\$5,000 (Capacity building budget)</p>

	pollution, wastes and environmental degradation	<ul style="list-style-type: none"> • TAG and CARA to review the environmental risk assessment and compliance with IFAD and the governments environmental standards before providing such services. • Training and technical assistance provided as needed to the cooperative farmers, livestock keepers and to operators and employees of related processing plants in: improved soil and water management practices; IPM; other practices increasing production sustainability and climate change adaptation and resilience; good manufacturing practices (waste management and resources use efficiency); and operation of renewable energy technologies 	business plans and financing agreements		
Component B: Climate Proofed Public Infrastructure and Improvement of Rural Living Conditions					
Activity B.1.1 Climate proofed Smart irrigation	<u>Social:</u> <ul style="list-style-type: none"> • Economic displacement by conversion of farmland to water ponds and pools. Will only affect very small areas 	<u>Social (PIM activity B.1.1 description)</u> <ul style="list-style-type: none"> • Transparent, informed and documented discussion with all farmers benefitting from the planned irrigation system to reach voluntary signed consent with land user rights holders for placing water ponds or pools on their land. Farmers may decide compensating affected farmers by transferring user rights to land from non-affected farmers. 	<ul style="list-style-type: none"> • Six-monthly monitoring of application of environmental and social risk management measures 	<ul style="list-style-type: none"> • County PMO backed up by the County Water Bureaus as needed 	<ul style="list-style-type: none"> •
Activity B.2.1 Improvement and					

<p>development of safe drinking water supply</p>	<p>(25m² -100m²) and no farmer affected will lose more than 10% of his/her land</p> <ul style="list-style-type: none"> Ad hoc organisation of O&M of irrigation systems and infrastructure may affect sustainability <p><u>Environmental:</u></p> <ul style="list-style-type: none"> Downstream impacts on water ecological systems from overuse of the water source Conversion of forest land to reservoirs and pumping stations 	<ul style="list-style-type: none"> Establishment of water users associations (WUA) or other O&M associations/groups at the irrigation infrastructure planning phase and involve them in the design of the irrigation system and the development of an O&M plan, including roles and responsibilities, budget and cost recovery mechanism. Training of WUA or other O&M group in irrigation water management using rainfall forecasts and operation and maintenance of water infrastructure <p><u>Environmental:</u></p> <ul style="list-style-type: none"> Surface water resources are in general plentiful in the rainy mountainous province (1200-1500 mm/year. The water source for the irrigation system investments will in most cases be water harvested and stored from mountain streams and springs. In some cases, it will pumped water from the rivers, The minimum dry season streamflow of those rivers are bigger than 1m³/second. The water volume intake will in all cases be far below the 0.028m³/second. There will be no pumping in the peak of the dry season where irrigation water will come from the stored water in ponds and reservoirs. There will be no pumping of ground water financed by the project. The water harvesting and irrigation infrastructures financed by the project are small scale and low risks 			
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	<ul style="list-style-type: none"> • Drainage water polluted with agrochemicals • Low efficiency in usage of irrigation water – 	<p>with ponds or small reservoir from 4-400m³. Only limited land areas will be used for reservoirs and pumping stations. Most of this land is currently village collectively owned barren land³³</p> <ul style="list-style-type: none"> • Only limited land areas will be used for reservoirs and pumping stations. Most of this land is currently village collectively owned barren land. • In most cases drip and sprinkler irrigation will be used and only in few cases surface/flood irrigation will be used for paddy fields, where proper drainage will be designed. • Farmers to be trained in IPM in line with the government’s action plan for capacity building and introduction of practices for reduction in the use of agrochemical, which has already led to a 30% reduction in pilot examples in some of the project counties. An important part of the production in the project areas are organic or green production certified meaning limited use of agrochemicals. • WUAs or other O&M associations/ group in areas of water scarcity will be trained in adaptive water management for water use efficiency under different climate conditions using digital water monitoring of water productivity and use efficiency 			
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³³ Regulations on the Management of Water Conservancy Projects in Yunnan Province (March 2018)

<p>Activity B.2.2: Improvement and development of road systems.</p>	<p><u>Social:</u></p> <ul style="list-style-type: none"> • Economic displacement by conversion of farmland to roads. Will affect limited areas and no farmer affected will lose more than 10% of his/her land • Ad hoc organisation of O&M of rural roads may affect their sustainability <p><u>Environmental:</u></p> <ul style="list-style-type: none"> • Soil erosion and increased risks of landslides from improper drainage and interventions on slopes and mountain sides removing vegetation 	<p><u>Social (PIM activity B.1.1 description)</u></p> <ul style="list-style-type: none"> • Transparent, informed and documented discussion with all farmers benefitting from the road and affected by its routing to reach voluntary signed consent with land user rights holders of farmland proposed for conversion to the road. Farmers may decide compensating affected farmers by transferring user rights to land from non-affected farmers. Monetary compensation may also be used. • Before the investment in any road infrastructure an operation and maintenance (O&M) plan for each section of the roads must be prepared, including roles and responsibilities, budget and sources of funding <p><u>Environmental:</u></p> <ul style="list-style-type: none"> • There will be a mixture of upgrading of existing roads and construction of new roads. Most of the roads are too small to require an environmental assessment. The responsibility for rural roads has been transferred to the CARA, who will oversee that proper erosion control and drainage measures are built into the bidding process, contracts, and the engineering design before they give the final permission for the road construction. 	<ul style="list-style-type: none"> • Six-monthly monitoring of application of environmental and social risk management measures 	<ul style="list-style-type: none"> • County PMO backed up by CARAs as needed 	<ul style="list-style-type: none"> •
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	<ul style="list-style-type: none"> • Conversion of forest land to roads 	<ul style="list-style-type: none"> • Township governments working with the County PMO will manage the contracting process. In addition to the constructing company, a supervision company will be contracted to oversee the works and its acceptance. A warranty is included in the construction contract, which makes the constructing company responsible for fixing any failures in the works, including the failure to apply proper soil erosion control and drainage measures, within the 1st year after the end of the project. • Most of the roads will go through current agriculture land and collectively owned barren land. In a few cases forestland will be impacted, which will require the assessment of impacts and approval from the forest Bureau. Forest land with any protection category should be avoided. 			
Activity B.2.4 Land improvement and preparation	<u>Environmental</u> <ul style="list-style-type: none"> • Loss of topsoil when levelling land and constructing terraces. 	<u>Environmental:</u> <ul style="list-style-type: none"> • Addition of organic to the soil after the levelling should be applied as part of the land improvement approach. 	<ul style="list-style-type: none"> • Verification in the field 	<ul style="list-style-type: none"> • County PMOs and CARAs 	<ul style="list-style-type: none"> •

Chapter 11: Terms of Reference of Staff Key PMO Staff

421. For successful implementation of the Project, a project management system, PMOs, will be established at county levels and at province level which will operate under the guidance of Provincial Department of Agriculture and Rural Affairs as lead agency. Specifically the Farmland Enhancement Division within DARA would take lead responsibility for project implementation management, supervision and evaluation, and will act as the Provincial Project Management Office (PPMO). Additional support will be mobilized from the Division of Cooperative Economy of DARA, and other division whenever needed. Major implementation responsibilities of the project lie with the counties. County Project Management Offices (CPMOs) will be established at the County Bureau of Agriculture and Rural Affairs. Relevant technical bureaus in the counties (such as water conservancy, metrological, transportation bureaus, etc.) will be mobilized to support the project implementation in the related activities of the project as per need.
422. The prime responsibilities of a PMO, inter alia, are to consolidate annual work plan and budget (AWPB) at their respective level, coordinate project implementation, manage the project resources, monitor project implementation, report on implementation progress on a six-monthly basis and project impact on required basis, and to ensure that project's implementation strategy is effectively applied in all activities. Generally, the overall responsibilities of the CPMO/PPMO staff are similar to that of a project management office. However, each PMO staff has his/her specific tasks and responsibilities in accordance with the post he/she holds. The main responsibilities of the key PMO staff are as follows:
423. **PMO Director/Officer:** The director/head of each PMO will undertake the overall responsibility of project implementation. The overall responsibility is to coordinate the PMO staff, relevant institutions and implementing agencies to ensure that the project implementation complies with the project Loan Agreement, strategy and requirements for reaching its objectives and goal. His/Her specific responsibilities mainly include the following points:
- Staff the PMO with qualified personnel in accordance with the requirements set forth in the Loan Agreement, work out the responsibilities of PMO staff, organize performance appraisal of PMO staff by the end of each year through linking the responsibilities with achievements of each PMO staff;
 - Work out management/administration regulations of the PMO to ensure that all PMO staff perform their duties properly and that project property, documentations, data and records are filed and kept properly;
 - Plan and organise necessary trainings and workshops for PMO staff and other relevant project personnel to raise their capacity, awareness, and responsibility senses of project implementation, particularly the trainings on project management, implementation modalities, M&E, gender sensitization, participatory planning, and targeting;

- Facilitate PMO staff executing their duties properly and ensure that all reports will be submitted to IFAD timely as required;
- Coordinate relevant institutions and implementing agencies to formulate project implementation plan, particularly AWPBs, in accordance with project strategy and approach, including the identification and selection of target villages and beneficiaries for each module and the adaptation of project modules to local conditions;
- Coordinate relevant institutions to ensure timely allocation of project resources to the implementing agencies to carry out the project, including IFAD loan and counterpart funds, and monitor the use of project resources to ensure that the project fund are not misused;
- Supervise the implementation of AWPBs to ensure that the project is implemented and appropriately targets to the eligible beneficiaries;
- Coordinate relevant institutions to ensure that women focused activities are well implemented and poor women's participation is fully focused;
- Plan and organise assessments/evaluations of project outcomes and impact, including the benchmark/baseline, mid-term, and completion surveys, and report the results to IFAD as required;
- Work out adjustment proposal of implementation and submit it to IFAD for "no objection" when needed, based on the up-to-date situation and results, for achieving project objectives.

424. **M&E Officer:** The M&E officer, under the guidance of project director, will undertake the responsibility of monitoring the project implementation, including project progress, achievements, availability of resources, expenditures, targeting, and gender mainstreaming, and collecting relevant data and reporting to project director to ensure that the project activities are implemented in accordance with project strategy and with approved AWPBs. The specific responsibilities are as follows:

- Develop project monitoring strategy and action plan, by component and by module, through consulting with relevant implementing agencies and related village implementing groups, including the methodology, channels, and procedures of data collection;
- Monitor the physical and financial progress and achievements of the project by component and by module;
- Monitor the allocation and flow of project resources including IFAD loan proceeds and counterpart funds, and their uses, to see if the funds are available to implementing agencies on time for carrying out the project and if the funds are used properly;

- Cooperate with relevant implementing agencies to monitor if the implementation of project modules targets to the poor and women appropriately in accordance with the project strategy;
- Assist project director to plan and organise assessments/evaluations of project outcomes and impact, including the benchmark/baseline, mid-term, and completion surveys as well as other irregular assessment activities;
- Plan and organise M&E training for relevant personnel to improve their capacity in performing M&E activities, including M&E methodology and techniques, RIMS, data collection, data analysis, and reporting;
- Prepare M&E report and project progress report and submit them to IFAD on time as required, after confirmation and approval of relevant PMOs;
- Report to PMO director regularly with proposals based on the analysis of M&E data to ensure that the project activities are implemented in accordance with the project strategy and approach.

425. **Gender and Youth Focal Coordinator (GYFC):** The GYFC, under the guidance of project director, will undertake the responsibility of ensuring gender equity and equality in project implementation through development and implementation of project gender strategy and action plan. The overall objective is to facilitate rural men and women equitably participating in project activities and benefiting on an equitable basis by creating necessary enabling environment, using appropriate tools to address gender differences, and by cooperating with all project stakeholders, particularly with Women Federation and other implementing agencies. The specific duties of the project GYFC include:

- Develop project gender strategy and action plan, particularly by component A, through consulting with relevant stakeholders and implementing agencies;
- Coordinate with relevant institutions and implementing agencies to fully address gender issues in the formulation of AWPBs;
- Coordinate and lead the implementation of targeting guidelines with appropriate guidance and process to reach women, youth, indigenous groups and disadvantage groups in the Programme area and ensure their meaningful participation and share of benefits from project interventions;
- Supervise the implementation of gender action plan through cooperation with the M&E officer to ensure equitable participation by men, youth and women in decision-making and project implementation;
- Integrate Gender, Youth and Targeting in the M&E system, in the AWP/Bs and Progress reports and project components and track the performance;
- Undertake regular capacity assessment and provide capacity-building for staff at the field level, PMU, implementing partners and service providers on gender and youth;

- Coordinate with relevant institutions and implementing agencies to create an enabling environment for women to play an effective and broad role in project activities and to ensure that women focused activities are conducted and attention will be drawn to enhance the quality of such activities to benefit women;
- Plan and organize gender sensitive training for relevant project staff involved in the project implementation, promote and disseminate the project's gender approach at all stakeholders.
- Coordinate with WFs to foster the capacity of poor women in participating in the cooperative activities under component-A of the project;
- Monitor resources allocation to support gender-related activities and assess and report results achieved.
- Transfer update gender mainstreaming knowledge from IFAD to the project area and report through provincial PPMO to IFAD any change of policies related to gender.
- Document good practices, outcome and impact of project intervention on youth empowerment, gender equality and women's empowerment for cross-learning and scaling up;

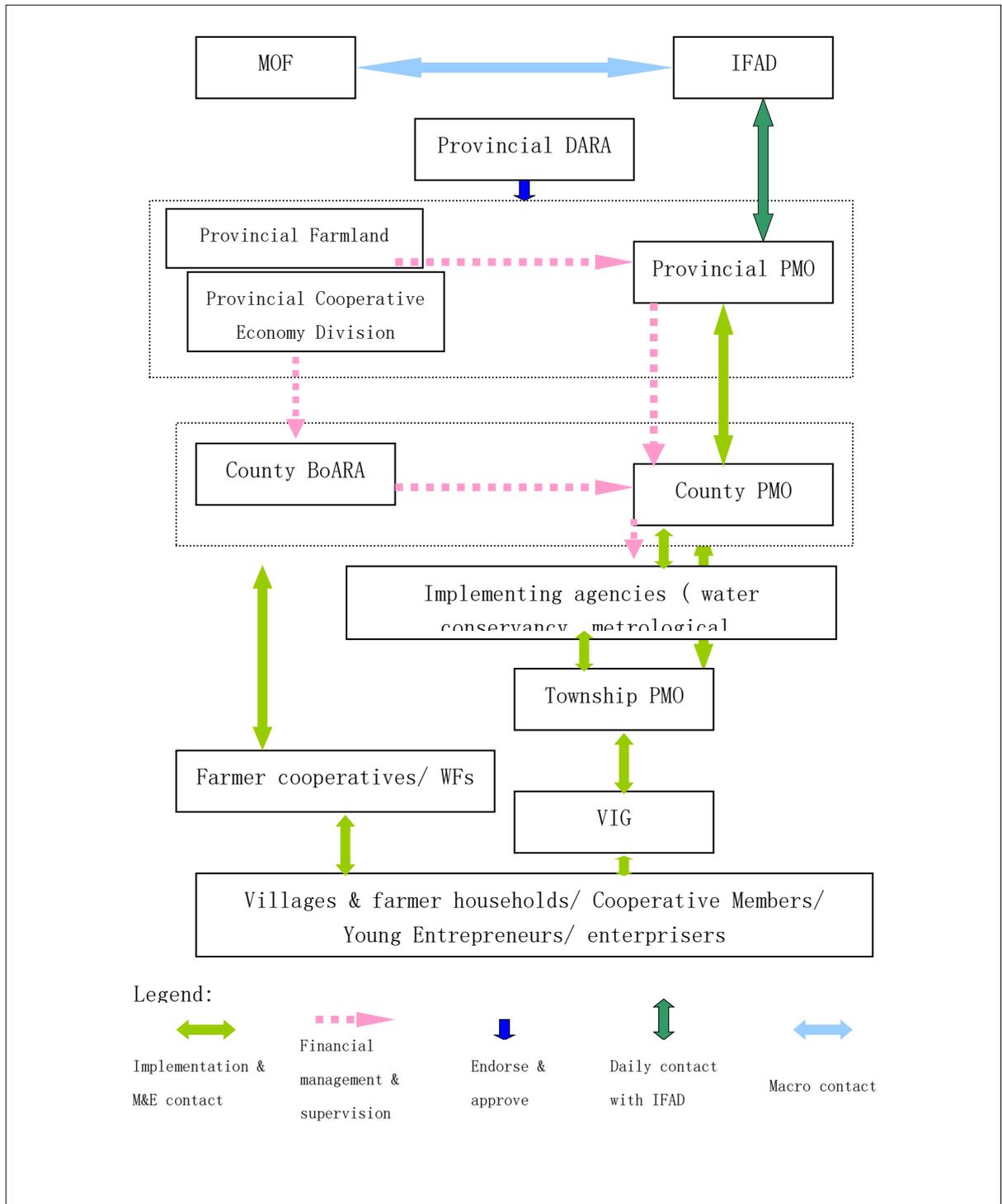
426. **Project Accountant:** The project accountant, under the guidance of project director, will take the responsibility of managing the Project Account, i.e. maintaining a separate account and records, preparing financial statements of the operations, resources and expenditures related to the project, setting up accounting subjects, transferring project resources to relevant implementing agencies, preparing withdrawal application and documents, to ensure that the project resources are well managed and used for project implementation in line with the Loan Agreement and the approved AWPBs. His/Her specific responsibilities are as follows:

- Work out, under guidance of project director, financial management regulation, and set up accounting subjects for the management of project resources;
- Open a project account under the guidance of project director, maintain a separate account and records and thereafter prepare the financial statements of the operations, resources and expenditures related to the project, and the prefecture PMO accountant will submit the financial statements through provincial PMO to IFAD timely as required after confirmation and approval of PMO and relevant departments;
- Well manage the flow and expenditures of project funds by subjects, and properly file and retain the records evidencing project expenditures for annual

audit by independent auditors and for inspection by the representatives of IFAD;

- Prepare withdrawal application and related documents of IFAD loan proceeds on a frequent basis, well manage the funds in the project account, timely transfer of project funds to relevant implementing agencies for carrying out the project;
- Supervise the use of project resources through cooperation with the M&E officer;
- Plan and organise necessary trainings or hold workshops for relevant accountants to improve their capacity in the management of project account and in the preparation of financial statements of the operation, resources and expenditures related to the project and withdrawal applications.

Project Organizational Structure



China

Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 9: Integrated Project Risk Matrix (IPRM)

Mission Dates: 27/04/2020 22/05/2020
Document Date: 12/10/2020
Project No. 2000002359
Report No. 5499-CN

Asia and the Pacific Division
Programme Management Department

Overall Summary

Risk Category / Subcategory	Inherent risk	Residual risk
Country Context	Low	Low
<i>Political Commitment</i>		<i>No risk envisaged</i>
<i>Governance</i>		<i>No risk envisaged</i>
<i>Macroeconomic</i>		<i>No risk envisaged</i>
<i>Fragility and Security</i>	<i>Low</i>	<i>Low</i>
Sector Strategies and Policies	Low	Low
<i>Policy alignment</i>		<i>No risk envisaged</i>
<i>Policy Development and Implementation</i>	<i>Low</i>	<i>Low</i>
Environment and Climate Context	Moderate	Moderate
<i>Project vulnerability to environmental conditions</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Project vulnerability to climate change impacts</i>	<i>Moderate</i>	<i>Moderate</i>
Project Scope	Low	Low
<i>Project Relevance</i>	<i>Low</i>	<i>Low</i>
<i>Technical Soundness</i>	<i>Low</i>	<i>Low</i>
Institutional Capacity for Implementation and Sustainability	Moderate	Low
<i>Implementation Arrangements</i>	<i>Moderate</i>	<i>Low</i>
<i>Monitoring and Evaluation Arrangements</i>	<i>Moderate</i>	<i>Low</i>
Financial Management	Substantial	Moderate
<i>Organization and Staffing</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Budgeting</i>	<i>Low</i>	<i>Low</i>
<i>Funds Flow/Disbursement Arrangements</i>	<i>Low</i>	<i>Low</i>
<i>Internal Controls</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Accounting and financial reporting</i>	<i>Moderate</i>	<i>Moderate</i>
<i>External Audit</i>	<i>Moderate</i>	<i>Moderate</i>
Project Procurement	Moderate	Low
<i>Legal and Regulatory Framework</i>	<i>Moderate</i>	<i>Low</i>
<i>Accountability and Transparency</i>	<i>Moderate</i>	<i>Low</i>
<i>Capability in Public Procurement</i>	<i>Moderate</i>	<i>Low</i>
<i>Public Procurement Processes</i>	<i>Moderate</i>	<i>Low</i>
Environment, Social and Climate Impact	Low	Low
<i>Biodiversity Conservation</i>		<i>No risk envisaged</i>
<i>Resource Efficiency and Pollution Prevention</i>	<i>Low</i>	<i>Low</i>
<i>Cultural Heritage</i>		<i>No risk envisaged</i>
<i>Indigenous People</i>		<i>No risk envisaged</i>

Risk Category / Subcategory	Inherent risk	Residual risk
<i>Labour and Working Conditions</i>		<i>No risk envisaged</i>
<i>Community Health and Safety</i>		<i>No risk envisaged</i>
<i>Physical and Economic Resettlement</i>	<i>Low</i>	<i>Low</i>
<i>Greenhouse Gas Emissions</i>		<i>No risk envisaged</i>
<i>Vulnerability of target populations and ecosystems to climate variability and hazards</i>	<i>Low</i>	<i>Low</i>
Stakeholders	Low	Low
<i>Stakeholder Engagement/Coordination</i>	<i>Low</i>	<i>Low</i>
<i>Stakeholder Grievances</i>	<i>Low</i>	<i>Low</i>
Overall	Moderate	Low

Country Context	Low	Low
Political Commitment		No risk envisaged
The political commitment of both central and local governments to the project goals/objectives have been and will remain persistently strong during the project life. Eradicating absolute poverty by 2020 and realizing inclusive rural transformation to vitalize the rural sectors and rural areas are on top of the government agenda. Necessary policies, various resources, and institutional performances are geared at the provincial and county levels towards aligning with these strategic goals and directions. Meanwhile, there is strong stability and continuity of political party and government leadership and strategies. No major risks are foreseen in terms of political commitment by governments.		
Governance		No risk envisaged
Overall governance at the relevant levels (primary province and county) is strong. There are relevant and adequate rules and procedures guiding the planning and budgeting, management of finance, procurement, staff and institutional performance and accountability, fraud and corruption prevention and conviction. Particularly for poverty reduction related projects, government attaches higher emphasis in accountability and performances. The new rural revitalization strategy envisages continued improvement of rural governance. For this project, the institutional set up and vertical/lateral coordination has been conducive for project management. No major risks are foreseen so far in terms of governance.		
Macroeconomic		No risk envisaged

<p>The macroeconomic situation and prospect of the country has been favorable and optimistic. Despite slowed pace of GDP growth during the last years and some trade frictions ongoing, the quality of development has been increasing as result of economic restructuring and boosting of domestic markets and consumption. Rural development continues to be given increased attention and support through various favorable policies and additional resource allocations. The macro economy shall maintain a stable and steady progress and is generally resilient to external shocks. The economy quickly bounced back from slow-down of the first two quarters due to 2020 COVID-19 pandemic. Consumption and market demand will remain steady growth and continue to anticipate increasing demand on quantity and quality agro-products from rural areas, as result of Government's strategy in boosting both domestic and export markets. Transportation and logistics condition continue to improve providing conducive marketing environment for rural products. No major risks are foreseen so far in terms of macroeconomic dimension.</p>		
<p>Fragility and Security</p>	<p>Low</p>	<p>Low</p>
<p>Risk:</p> <p>i) Animal diseases such as the prevailing swine fever will have some impact to the pig production in the project area; (ii) Human epidemic such as the Novel Coronavirus may occur but will mostly be managed in short duration, so should not have major impact to the project.</p>	<p>Low</p>	<p>Low</p>
<p>Mitigations:</p> <p>i) Project counties and business entities involved in pig production will continue to undertake necessarily measures to prevent the occurrence of swine fever in their localities; (ii) County governments continue to take due considerations of disaster preparedness in their budgetary and management planning, taking lessons from the recent COVID-19 epidemic. Project has included such activities to enhance preparedness and responsive measures</p>		
<p>Sector Strategies and Policies</p>	<p>Low</p>	<p>Low</p>
<p>Policy alignment</p>		<p>No risk envisaged</p>
<p>The project is well aligned with the government strategy and policies relating to rural development and poverty reduction. The core focus of the project "poverty reduction through inclusive farmer cooperatives and pro-poor value chain development" is a top priority of government's most recent rural revitalization strategy. Governments expect IFAD project to add value by demonstrating innovative ideas and practices that can contribute to the poverty reduction and inclusive rural transformation efforts of the government. The focuses of the project on sustainable benefit generation for and sharing with relatively poor population, role of women and youth as well as thriving private sector and farmer organizations etc.. are also at the core of the government policies for rural transformation. No major risks are identified in terms of policy alignment of the project.</p>		
<p>Policy Development and Implementation</p>	<p>Low</p>	<p>Low</p>

<p>Risk:</p> <p>The risks pertain to: (i) the limited responsiveness and thorough implementation of central policies to their full effect, e.g. the Farmer Cooperative Law, mostly due to limited local governance capacity and sectoral/locality particular agendas; (ii) China's agricultural and rural development has traditionally focused on production/productivity enhancement, with strong emphasis on infrastructure and inadequate attention to post-production/marketing and other rural based non-farm opportunities; (iii) Inadequate incentives/services are putting into place for talents to thrive in rural areas contributing to rural development; (iv) emerging emphasis on new themes that may diminish the focus of the project, such as ICT4D. This may result in cases of local over-production and limited income generation opportunities, which will lead to limited value add and farmers' income.</p>	Low	Low
<p>Mitigations:</p> <p>(i) The project will pilot models relating to inclusive agribusiness, farmer cooperative standardization and agribusiness/value chain development, which is essential for the implementation and eventual contribution of the program to the relevant government policy agenda;</p> <p>(ii) Professional & technical guidance and support from the provincial and county PMOs and expertise to the pilot is critical and will be mobilised;</p> <p>(iii) Alignment with national agencies will be explored to enhance full implementation of related policies especially those relating to farmer cooperatives.</p> <p>(iv) Special support and improved rural services for rural talents to thrive in their rural based business will be conducive to the realization of rural revitalization agenda.</p> <p>(v) project design adopted framework approach allowing flexibility to adjustment to responding to emerging policy priorities. ICT for ag and rural development has been given adequate space in project design.</p>		
<p>Environment and Climate Context</p>	Moderate	Moderate
<p><i>Project vulnerability to environmental conditions</i></p>	Moderate	Moderate
<p>Risk:</p> <p>Most of the project counties are in mountain areas, notwithstanding their differences, each may post different type and degree of following environment risks:</p> <p>(i) High risk of geophysical hazards notably earthquakes, floods and landslides are anticipated in the project though their occurrence probability is low;</p> <p>(ii) Soil and water erosion is common in the project area, due to outdated and limited investment and summer torrential rain, and will have impact on productive activities of project;</p> <p>((iii) Inadequate O&M arrangements in place to offset environmental hazards</p>	Moderate	Moderate

<p>Mitigations:</p> <p>(i) Infrastructure improvement of road, land and soil and water conservation will be given high priority in the project investment to ease the situation;</p> <p>(ii) project adopts climate risks analysis and early warning allowing early intervention to minimize risk;</p> <p>(iii) Community O&M groups and extensions services will include awareness and mitigation practices in related risks including training and agronomic best practices;</p>		
<p>Project vulnerability to climate change impacts</p>	Moderate	Moderate
<p>Risk:</p> <p>(i) Increases in temperatures both in summer and winter may increase the magnitude of dry spells and droughts. Seasonal and sporadic droughts, floods and are anticipated in the project areas. Meanwhile it may also reduce the risk of extreme winter. It is identified that the number of frozen days in the ten counties will generally decrease. There was also reported hail incidents in some areas.</p> <p>(ii) More variations in rainfalls quantity and intensity, which may affect the viability of rain-fed agriculture in the absence of irrigation or water harvesting technologies, and may increase the likelihood of floods and landslides with shorter but more intense rainy seasons;</p> <p>(iii) Changes in rainfall patterns: longer days in dry season may increase the risks of droughts and have detrimental consequences for the agricultural production. In contrary, it is also identified that some areas will experience a longer wet season (number of consecutive rainy days).</p>	Moderate	Moderate
<p>Mitigations:</p> <p>(i) The project will finance a set of activities to improve water and irrigation related facilities;</p> <p>(ii) Project will improve farmers' access to weather and climate forecast information and advice on options to make their farming practices more resilient to climate change;</p> <p>(iii) Technical extension services will include agronomic measures responding to climate induced risks</p>		
<p>Project Scope</p>	Low	Low
<p>Project Relevance</p>	Low	Low
<p>Risk:</p> <p>The mains risks pertain to the fact that the benefit generated by the project may not adequately support those economically less active poor households for their increased income, because: (i) income from agricultural production constitute a relative small proportion of the rural people, the project's contribution to their household income increase could be limited; (ii) many remaining poor either have their land transferred or are lack of labour.</p> <p>Similarly, the project ambition to foster development of genuine pro-poor farmer cooperatives might be under achieved due to limitation in resources and technical support, and lack of motivation of small holder participation.</p> <p>The functioning of the incubation center and continued private sector investment could be short-lived should the project not be able to demonstrate the value of its provisions and models.</p>	Low	Low

<p>Mitigations:</p> <p>(i) Encouraging contract farming, labor employment, land rent and dividend generated from project invest assets in order to benefit different kind of poor households. (ii) Encourage business plans that take advantage of rural resources based income generating opportunities for the poor households are also considered eligible for project support. (iii) Involve technical specialists by PMOs and align the project with Government's programme in promoting specialized farmer cooperative. (iv) The businesses of the incubation center and private sector investment will be geared towards the industry/sector with the best market potential and beneficiary/partner participation.</p>		
<p>Technical Soundness</p>	Low	Low
<p>Risk:</p> <p>The risks relating to technical soundness of the project pertain to: (i) technical details of the project models and introduced rural services may not be adequately specific enough for local implementation; (ii) Insufficient understanding of the RBL approach by the relevant implementers on the ground, and misunderstandings about the need for sufficient upfront budget allocation - which may cause delays. (iii) due to parallel financing nature, synergy of government investment with IFAD financing could risk being diminished if not properly planned and budgetary managed.</p>	Low	Low
<p>Mitigations:</p> <p>(i) Project/IFAD will raise awareness and create enough understanding about the principles of the RBL approach, and undertake necessary assessment and safeguard beforehand if and as required; (ii) More frequent and flexible and joint SIS from IFAD/Project to monitor and follow up with the implementation to address the emerging issues and ambiguities on implementation details; (iii) AWPB will be made/coordinated at county level with full engagement of concerned line agencies and budgetary assurance.</p>		
<p>Institutional Capacity for Implementation and Sustainability</p>	Moderate	Low
<p>Implementation Arrangements</p>	Moderate	Low
<p>Risk:</p> <p>The PMOs at province and four out of ten counties are familiar with and have demonstrated good capacity in managing IFAD projects. Nevertheless given the new scope and new features in the project, there is a moderate likelihood that institutional capacity/efforts for implementing and sustaining the operational management may adversely impact the project objective, especially during the initial start-up phase: (i) Project design is innovative in nature and include thematic areas not traditionally areas of competence by government agencies; (ii) the engagement of other line agencies may diminish when due priorities of certain counties are not given to some of the designed focuses, such as youth and gender transformation, climate services, agribusiness and value chain development; (iii) inter-agency coordination may not be effective and may hamper progress of certain activities (infrastructure, rural services, women and youth related activities)</p>	Moderate	Low

<p>Mitigations:</p> <p>(i) Start-up mobilization/training, practical and detailed enough PIM and technical team of PMOs will help quicken on-board of implementation;</p> <p>(ii) Project coordinating functioning at both province and county levels will be monitored and enhanced during implementation;</p>		
<p>Monitoring and Evaluation Arrangements</p>	<p>Moderate</p>	<p>Low</p>
<p>Risk:</p> <p>The province is familiar to IFAD M&E requirement and has the capacity and resources to guarantee robust M&E work for the project. Technical service provider has also been identified to support the project M&E. ICT tools will be explored for project M&E. Overall the M&E risk is low in this project. Nevertheless, the following could be the potential weaknesses: (i) given the multi-layer structure of the project, there could be limitation in cohesion of M&E work and availability/capacity of M&E focal point at all levels; (ii) the PMOs may not demonstrate strong ownership and effective use of M&E services/tool/support/information; (iii) Project offices may have some tendency of complying M&E requirement instead of proactively managing project using M&E as a tool; (iv) inadequate accuracy of data and information if not properly quality assured.</p>	<p>Moderate</p>	<p>Low</p>
<p>Mitigations:</p> <p>i) Project will fully engage a technical team from the province to support the M&E work; (ii) Project Offices should designate staff for ME and undertake regular follow up and analysis to make use of the information collected; (iii) A plan for M&E linked with knowledge management should be developed to give orientation to the overall work, including clarity on roles and how/who to use the M&E information; (iv) Continued follow up and reminder from IFAD to enhance the M&E based learning and policy agenda of the project; (v) IFAD SIS missions will closely monitor and support the performance of project M&E to ensure quality; (vi) project will develop web-based MIS to support M&E work</p>		
<p>Financial Management</p>	<p>Substantial</p>	<p>Moderate</p>
<p>Organization and Staffing</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Risk:</p> <p>Training for government finance staff is a major constraint that is affecting the accounting reforms and its implementation. Staff from line ministries is also lacking experience with the new procedures.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>The PPMO organization structure will be composed of a Project Director who has the overall responsibility for the project, and a Finance Manager who has financial responsibility. An Accountant and a Cashier will also staff the finance team of the PPMO. The technical officers in the PPMO will have review and pre-approval functions, similarly at the county PMOs.</p> <p>The finance team of each CPMO will be composed of one Accountant with overall financial responsibility at the county level.</p>		
<p>Budgeting</p>	<p>Low</p>	<p>Low</p>

<p>Risk:</p> <p>Budgets lack details. Much of the expenditure is off the budget. There are gaps between the approved budget and the final execution. Such Discrepancies are for both revenue and spending.</p>	<p>Low</p>	<p>Low</p>
<p>Mitigations:</p> <p>The Hunan PPMO, after consultations with project stakeholders, shall prepare its annual budget, linking all the planned activities to the disbursement categories of the Schedule II of the Financing Agreement. This exercise will take place in advance of the preparation of the national budget to ensure that the required Government funds are timely allocated. All financing sources of the project should be clearly stated in a consolidated budget.</p> <p>Counterpart funding will be allocated for the project by province, counties and districts. The government will ensure that counterpart funds are contained in the domestic fiscal allocations for each county and that they are released for the project on time. The counterpart funding will be maintained in the Treasury Accounts of the counties and will be used to pre-finance eligible expenditures of the project as well.</p>		
<p>Funds Flow/Disbursement Arrangements</p>	<p><i>Low</i></p>	<p><i>Low</i></p>
<p>Risk:</p> <p>The 1994 Budget Law has strengthened the redistributive role played by the Central Government. There are gaps in the control and financial risks at the local level,</p> <p>Analysis of cash and asset position made to government contains significant omissions.</p>	<p>Low</p>	<p>Low</p>
<p>Mitigations:</p> <p>No action proposed.</p>		
<p>Internal Controls</p>	<p><i>Moderate</i></p>	<p><i>Moderate</i></p>
<p>Risk:</p> <p>Reconciliation with bank account statements only takes place with the final accounts, after the budget year has closed. New procedures have been introduced (for instance, Procurement and Accounting). The administration, accounting and reporting of the project will be set up in accordance with Circular No. CAIJI (2011)-10: "Provisional Measures for Financial Management of Projects Financed by Loans and Grants from International Financial Organizations" issued in 2011 by the Ministry of Finance.</p>	<p>Moderate</p>	<p>Moderate</p>

<p>Mitigations:</p> <p>The internal control arrangements for H2RDP should consider: (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) random independent reviews; (e) clear procedures for timely monitoring and financial reporting from the Implementing Agencies of the project. The Provincial PMO shall define the appropriate internal controls in the Financial Management Manual, as part of the PIM.</p>		
<p>Accounting and financial reporting</p>	<p><i>Moderate</i></p>	<p><i>Moderate</i></p>
<p>Risk:</p> <p>Government accounting is still under reform to comply with international standards and the accrual basis of accounting. Financial systems only capture and report on the most basic financial data. It is difficult for the central authority to monitor outlays and track the use of intergovernmental fiscal transfers.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>The project will procure a web-based integrated software to support the core management functions at the central and county levels, such as business plan development, financial management and project monitoring and evaluation. The financial management module of the integrated software will comply with the IPSAS accrual basis of accounting and will have the functionality to report by disbursement category, project component and financing sources at each level of implementation.</p>		
<p>External Audit</p>	<p><i>Moderate</i></p>	<p><i>Moderate</i></p>
<p>Risk:</p> <p>The National Audit office (NAO) has strengthened relevant rules, issued standards and provided trainings to improve the professional skills of auditors. Auditing bodies at the local level are not fully effective. The audits are focused more in compliance.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>H2RDP's annual accounts will be audited by the Hunan Provincial Audit Office (HPAO) on an annual basis in accordance with International Standards on Auditing (ISA) and following the IFAD Handbook for Financial Reporting and Auditing. The audited project financial statements together with the auditor's opinion (following ISA 705) will be submitted to IFAD in English within six months from the end of the fiscal year. The HPAO is constituted as an independent body under the National Audit Office (NAO). The NAO delegates to the Provincial Audit Offices (PAOs) the external audits of provincial donor-funded projects in China. IFAD has previous experience with other PAOs, and these audit arrangements are deemed acceptable to IFAD.</p>		
<p>Project Procurement</p>	<p><i>Moderate</i></p>	<p><i>Low</i></p>
<p>Legal and Regulatory Framework</p>	<p><i>Moderate</i></p>	<p><i>Low</i></p>

<p>Risk:</p> <p>The risk that the Borrower's regulatory and institutional capacity and practices (including compliance with the laws) are inadequate to conduct the procurement in a manner that optimizes value for money with integrity.</p>	Moderate	Low
<p>Mitigations:</p> <ol style="list-style-type: none"> 1). Review periodically the application procurement in accordance with the national procurement law, regulation and implementation policies. 2). Review and clear project procurement plan (consolidated) encouraging the use of competitive procurement methods 3). Provide consolidated procurement information on project website (opportunities and awards) 4). Ensure waiver for RBL component clearly articulates provision waiver or specific provision in the general conditions in reference to procurement. 		
<i>Accountability and Transparency</i>	<i>Moderate</i>	<i>Low</i>
<p>Risk:</p> <p>The risk that accountability, transparency and oversight arrangements (including the handling of complaints regarding, for example, SH/SEA and fraud and corruption) are inadequate to safeguard the integrity of project procurement and contract execution, leading to the unintended use of funds, misprocurement, SH/SEA, and/or execution of project procurements outside of the required time, cost and quality requirements.</p>	Moderate	Low
<p>Mitigations:</p> <ol style="list-style-type: none"> 1). Provide confidential report of complains received, under investigation and resolved. 2). Establish appropriate level of procurement reviews post and prior based on risk 3). Identify and report on risk flags during procurement supervision 4). Use IFAD standard bidding documents, which include provisions for prohibitive practises and safeguards 5). Ensure waiver for RBL component clearly articulates provision waiver or specific provision in the general conditions in reference to procurement conditional upon strengthening reporting of prohibitive practises, misprocurement and eligible expenditures associated with this. 		
<i>Capability in Public Procurement</i>	<i>Moderate</i>	<i>Low</i>
<p>Risk:</p> <p>The risk that the implementing agency does not have sound processes, procedures, systems and personnel in place for the administration, supervision and management of contracts resulting in adverse impacts to the development outcomes of the project.</p>	Moderate	Low

<p>Mitigations:</p> <p>1). Retain procurement professional to support intermittently 2). Periodic training and support to be provided to various implementing agencies teams. 3). Ad-hoc offsite coaching by IFAD accredited procurement consultant.</p>		
<p>Public Procurement Processes</p>	<p>Moderate</p>	<p>Low</p>
<p>Risk:</p> <p>The risk that procurement processes and market structures (methods, planning, bidding, contract award and contract management) are inefficient and/or anti-competitive, resulting in the misuse of project funds or sub-optimal implementation of the project and achievement of its objectives.</p>	<p>Moderate</p>	<p>Low</p>
<p>Mitigations:</p> <p>1). To be assessed in 2021 through the supervision mission (1st year of operations) 2). RBL component shall guided evidence and targeting outlined in the 3 rd party independent validation report and the project audit report</p>		
<p>Environment, Social and Climate Impact</p>	<p>Low</p>	<p>Low</p>
<p>Biodiversity Conservation</p>		<p>No risk envisaged</p>
<p>The project will not undertake activities that may cause significant threats to or the loss of biodiversity and ecosystem and its services. In fact the project activities will help to conserve soil and water resources, promote the production of quality and diversified locally specialize products/food. By adopting good agricultural practices, the project will also be conducive to the sustainable use of natural resources.</p>		
<p>Resource Efficiency and Pollution Prevention</p>	<p>Low</p>	<p>Low</p>
<p>Risk:</p> <p>Project triggered risks pertain to: (i) Soil and water pollution was reported in the project areas from agricultural intensification and livestock development, in the nature of heavy metal and chemicals residues; (ii) Project activities include reclaiming barren hills (e.g. tea plantation in Guzhang), construction of rural roads, small-scale irrigation works and agro-processing facilities may cause soil and water erosion is not properly managed; ay cause soil erosion;</p>	<p>Low</p>	<p>Low</p>
<p>Mitigations:</p> <p>(i) Relevant rules and by-laws of government in water resources management/utilization, pollution control and food safety will be followed during project implementation; (ii) Business plans will adopt, as much as possible, food quality and safety as part of their marketing and value chain development objectives; (iii) Government will also conduct its own Environment Impact Assessment for project and explore measures to mitigate perceived risks</p>		

Cultural Heritage		No risk envisaged
The project activities do not foresee impact to degradation or loss of resources of historical, religious or cultural significance.		
Indigenous People		No risk envisaged
About 30% of the population in the project area belong to ethnic minority group. Ethnic minorities in the project area are in general well integrated in the existing socio-economic context, have livelihood strategies similar to those of the other rural populations, are not excluded from existing economic opportunities, are not discriminated, and have not distinct needs from the rest of the population. They are vulnerable not because belonging to an ethnic minority group, but because they live in poor and not well developed areas. Government policies targeting rural poor and vulnerable households do not differentiate based on ethnicity, but target based on poverty indicators. Program will thus give special emphasis to ethnic minorities to enhance their participation in the program, subsequently their awareness, economic capacity, and social status.		
Labour and Working Conditions		No risk envisaged
The project will be implemented following the national laws and regulations which shall offer protection to the target group of their labor rights and work safety. Any employment will be on voluntary basis and third party services will be procured on competitive basis and following relevant rules and regulations. The project will provide particular emphasis for empowering women in their social and economic participation, benefit and status, thus contributing to their social and household status to minimize gender based violence towards them.		
Community Health and Safety		No risk envisaged
The project will be implemented following the national regulations and standards in terms of hazard prevention to the communities. Contract terms for infrastructures usually include provisions for consideration of safety and health. Agriculture activities will not impact drinking water safety. Food safety and nutrition will be one of the pursuits of project supported production interventions.		
Physical and Economic Resettlement	Low	Low
Risk: There is some risk of economic displacement by conversion of farmland to infrastructure sites such as water pond and pools.	Low	Low
Mitigations: Project related infrastructure will be limited to small areas and no farmer affected will lose more than 10% of his/her farmland. Transparent, informed and documented discussions with all farmers benefiting from planned infrastructure will be made to reach informed consent. Compensations will be made either by transferring land user rights from others or long term cash subsidy to affected farmers. Government regulations prescribes such prior informed processes and consent decisions.		

Greenhouse Gas Emissions		No risk envisaged
The project will generally contribute to the reduction of GHG as result of promoting carbon sequestration crops. The project activities will not involve excessive CO2 emissions.		
Vulnerability of target populations and ecosystems to climate variability and hazards	Low	Low
Risk: The project will not cause but minimize vulnerability of target groups and ecosystems to climate variability and hazards, this will be achieved through improvement of water and soil conservation infrastructure, adoption of climate adaptive varieties, technologies and production practices, extension of related knowledge to farmers.	Low	Low
Mitigations: Program implementation will follow the technical requirements spelled out in the relevant rules and by-laws of the governments, and technical advices of professionals to minimize negative impact that may exacerbate the vulnerability of the target populations.		
Stakeholders	Low	Low
Stakeholder Engagement/Coordination	Low	Low
Risk: The risk on stakeholder engagement pertain to: (i) ad-hoc consultation at design and inadequate involvement during implementation of line agencies leading to delayed implementation or sub-standard results for the RBL approach; (ii) Lack of participation or technical support from provincial level of offices responsible for agro-industry development to guide implementation and learn from project experience so to maximize the project benefit; (iii) limited incentives to and mobilization of other line/technical agencies and partners for aligning with project to build synergy, such as rural finance and climate service, women and youth organizations; (iv) limitation in full engagement of private sector and farmer cooperatives due to lack of publicity or transparency and their business coverage, or particular preference of county government on sub-sectors for project support.	Low	Low
Mitigations: (i) Adequate consultation and assessment will be made at or after design to bring the relevant partners on board and to the same understanding; (ii) Transparency on project support and financing rules will be maintained through proper dissemination of information during project implementation; (iii) Business plans will be diversified to avoid narrowly focusing on a few products; (iv) Project workshops and meetings shall include all stakeholders as and when possible. (v) Project management offices will reach out to all relevant partners to call for application of business plans.		
Stakeholder Grievances	Low	Low

<p>Risk:</p> <p>Systems and opportunities are in place for stakeholders to express their opinions and complaints emerged during their interaction and participation of the project. Major project procurements are disclosed for publicity before deals are confirmed. Project Apps accepts feedback from users. Government agencies have open channels to receive complaints and reports of misconduct during project implementation. Regular project workshop involves relevant stakeholders. The risk of suppressed or unattended stakeholder complaints is minimal.</p>	<p>Low</p>	<p>Low</p>
<p>Mitigations:</p> <p>VIGs will conduct regular notifications to the villagers on the planned activities and means/criteria of participation</p>		

China

Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 10: Exit Strategy

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Asia and the Pacific Division
Programme Management Department

Annex 10: Exit Strategy for H2RDP

1. H2RDP aims to pilot measures and approaches that can better contribute to the realization of the Rural Revitalization Strategy of the government. The Rural Revitalization Strategy aims to achieve more appropriate balance of the two-tier Chinese economy and society, by developing the rural areas to equally attractive places as urban areas for rural population to reside, to a status with thriving industry, liveable ecology, civilised ethics, effective governance and better-off livelihood.

2. To achieve that goal, the entry points adopted by H2RDP are:

- 1) Promoting the agricultural resources based industry that can not only augment profitability and added-value but also be more inclusive so that smallholding producers and relative poor households can also be engaged and take advantage to benefit;
- 2) Promoting rural entrepreneurship especially the young and women to seize/diversify income generating opportunities in rural areas for themselves as well as other rural smallholders, at the meantime attract investment to rural area;
- 3) Improving public and collective rural services to enhance the resilience of smallholders and rural businesses as well as efficiency and convenience in perspectives improving rural livelihood.
- 4) Improving rural infrastructure to facilitate agricultural and rural business development

3. The project will be implemented in ten counties of Hunan Province, but it is expected that its approaches and practices if proven successful will inform governments within and beyond the project areas for further replication and scaling up.

4. A sound exit strategy of the project thus would need to demonstrate its considerations in the following dimensions: a) effectiveness and sustainability of project interventions and values during and after project implementation and; b) potential scaling out/up project experiences and lessons to inform government strategies and policies in rural revitalization.

5. In terms of the effectiveness and sustainability of project interventions, the following will contribute to the exit strategy of the project:

- i) Alignment and synergy with government strategies and programs to ascertain political commitment and sustainability of resources.

H2RDP aligns most of its strategic and implementation features with government strategies and policies. Mainstreaming smallholders in modern agriculture and revitalizing the rural areas with thriving industry that can benefit the smallholders are the key strategies of the government that H2RDP will closely aligned with. While the project will support all types of New Economic Entities, preference will be given to those adopting pro-poor considerations especially entities collectively owned by farmers such as farmer cooperatives. Throughout the implementation, the project shall focus on demonstrating inclusive, equitable and sustainable business models adopting a value chain approach.

The project has adopted results based lending approach to incentivize the Professional Farmer Training program of the government. It is important that there is not only adequate commitment to test such BRL indicators to enhance the training program but also use it to garner cost-results sensitivity for the training program to get learning from such approach to enhance efficiency as well.

Human resources development especially the focus to youth and women will nurture new farmers for rural China to vitalize. Evidence based success and experience in all these areas

shall draw due emphasis from governments for continued support of project practices and values. A robust Management Information System (MIS) plus a considerate knowledge management strategy will be developed for H2RDP to serve management and strategic purposes.

- ii) Sustained inclusiveness of New Economic Entities and their favorable and lasting partnership with smallholders ascertain continuity of project benefit.

H2RDP shall adopt competitive and transparent process to select agri-business partners for the smallholders. Sub-sectors with local specialties and market comparative advantages will be prioritized as result of value chain mapping during design and implementation process. Public finance to the business partnership shall not constitute subsidy to either of the partners in the relation, rather will be catalyst to forge business relation and start/expand business operation. The engagement of smallholders in the business of New Economic Entities shall be sustained by the mutual benefit to be demonstrated by such business relations, therefore it is important such mutual benefit be attained during project implementation. Performance of business and inclusiveness will be linked to disbursement of public support, also as part of the project M&E indicators. Government services will be availed to the partnership during and after project completion, to facilitate maturity of business operation such partnership.

Incubation centers established by the project will aim to graduate from initially subsidized operation at project start to self-survival at project completion from services offers. External partners for related business services (e.g. training of young entrepreneurs etc) will be networked as sustained resources for these centers to continue their service provision.

- iii) Stakeholder institutional capacity building, gender transformation and beneficiary empowerment.

The success of the project depends critically on the comprehension and commitment of the involved government and New Economic Entities of the project strategy and approach, who shall be oriented throughout project implementation but heavily during project start. The key of the strategy is to promoting thriving and inclusive industry with diversified business opportunities based on agricultural and rural resources and value chain approach that generates and retains as much added value as possible for the production end. Therefore H2RDP shall adopt adequate beneficiary participation in developing business plans where they are one of the benefiting partners. Through such business partnership, H2RDP shall empower smallholders with due decision making in agro-business management. The same applies to H2RDP's special support to rural women and youth as result of which their decision making power, their voices and their development opportunities will all be expanded. Project management offices will be established on basis of existing offices within the government systems to ascertain continuity, gender awareness will be improved through project intervention, women related institutions will be supported and given due responsibility and recognition in the project. Private entities involved in the project will be selected based on criteria considering their sustainable operation.

- iv) Robust technical and economic sound business proposals to increase expanded value of production and seize diversified income generating opportunities to explore benefits for all partners.

The review and approval committees of H2RDP shall employ experienced/competent technical reviewers to ascertain business proposals are technically sound and economically viable. As much as possible, value chain approach will be adopted by all BPs. Project MIS shall be developed to monitor the performance of BPs during the project implementation. Profitability from project support agri-business partnership shall provide incentive for private entities to continue invest in the rural sectors.

- v) Improved public services to facilitate rural business development and rural livelihood

H2RDP will enhance the resilience of project groups to climatic and epidemic risks and vulnerabilities by enhancing their awareness, knowledge and predictability of such risks. Collective services to address some of the challenges facing individual smallholding households either in production/marketing related or livelihood areas shall gain economy of scale and targeted support to certain groups of the beneficiaries in a more decentralized and transformed rural areas. Such services should be further institutionalized as result of project pilot and implementation.
 - vi) Finally, the project supported infrastructures shall adopt adequate climate considerations to mitigate risks and be sustained in their functioning through the O&M arrangements introduced by the project.
- 5) In terms of the sustaining the value of the project for replication and scaling up/out, the following will contribute to the exit strategy of the project:
- (a) Partnership with government institutions and other partners including UNWomen and private business service providers to share, learn, replicate and scale up effective and innovative ideas and experiences derived from H2RDP. Central level agencies such as MOF, NDRC, LGOP have strong expectation from IFAD finance project for innovations and best practices. A number of features in H2RDP, once prove to be successful, shall inform the Ministry of Agricultural and Rural Affairs (MARA) for adoption in their program and policies, such as mainstreaming smallholders in modern agriculture, innovative rural services, rural youth entrepreneurship program, climate service for agricultural production etc.. Similar for gender transformation, IFAD can offer related government institutions new approach of interventions to make agriculture and rural sectors more gender equality. There partners will be the key drivers for the knowledge and scaling up agenda of the exit strategy.
 - (b) Building synergy with other interventions of the IFAD country program such as analytical works, technical assistance, impact assessments, policy engagement, south-south cooperation and partnerships to extract and disseminate policy related learning from H2RDP. Interventions will be built in H2RDP to allow a process of knowledge capturing, sharing and policy influence be led by the PPMO to explore scaling up of best practices derived from the project. It is essential that a robust MIS and knowledge management strategy is developed at outset of project, properly implemented and fully exploited to offer learning space for possible scaling up.
 - (c) Exploring spaces in the context of government strategic pursuit to revitalize rural areas to scale up project best practices, this relates to political emphasis, financing required from both government and private sectors, engagement of related institutions both at local and national levels. Partnership shall be explored with academic institutions (such as the Chinese Academy of Agricultural Sciences) both for M&E and for analytical work, development partners for sharing and learning from each other, and related service providers and local institutions to scale up project introduced practices. Continued mobilization of private sector financing to project initiated/supported businesses and market exploration adopting e-commerce and other effective channels also helps.
- 6) Potential focuses for sustained effect and for learning and scaling up of H2RDP may include, but not limited to, some of the following: Result Based Lending to improve quality and effectiveness of professional farmer training, Incubation Center, pro-poor New Economic Entities development, climate related risk mitigation schemes and services, various inclusive agri-business models adopting value chain approach, innovative rural services, climate proof techniques in irrigation and infrastructure development, benefiting mechanisms involving smallholders, business plan for strategic

development of agro-entities, Management Information System for results-oriented project management.

7) To successfully implement the above outlined exit strategy, due efforts and certain provisions should be made during project implementation. Among others, it will be important for all PMO staff to comprehend and appreciate the project strategy and key design features, staff training and exchange visits shall be regularly conducted, especially during the project start up. Adequate budget for project M&E and knowledge management should be made available. Engagement of relevant partners and agencies including such as Women Federations, private business service providers and specialists. H2RDP shall undertake necessary advocacy and policy related events to engage and inform partners and policy makers. Project Implementation Manual (PIM) shall outline key technical requirements and processes to guide the implementation of the strategic and technical features and approaches that may generate potential for replication and scaling up. Technical assistance will be imperative especially in the areas of business plan development and agri-business management. H2RDP shall also actively participate in IFAD program related activities including annual portfolio review, COSOP consultation and policy related events. H2RDP shall also maintain regular interaction with key stakeholders and partners at national and provincial level.

China

Hunan Rural Revitalization Demonstration Project Project Design Report

Annex 11: Mainstreaming themes – Eligibility criteria checklist

Mission Dates: 27/04/2020 22/05/2020
Document Date: 12/10/2020
Project No. 2000002359
Report No. 5499-CN

Asia and the Pacific Division
Programme Management Department

Mainstreaming themes – Eligibility criteria checklist

	<input checked="" type="checkbox"/> Gender transformational	<input checked="" type="checkbox"/> Youth sensitive	<input type="checkbox"/> Nutrition sensitive	<input checked="" type="checkbox"/> Climate finance
Situation analysis	<input checked="" type="checkbox"/> National gender policies, strategies and actors <input checked="" type="checkbox"/> Gender roles and exclusion/discrimination <input checked="" type="checkbox"/> Key livelihood problems and opportunities, by gender <input checked="" type="checkbox"/> Use (pro-WEAI) assessment for M&E baseline	<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 type="checkbox"/> National nutrition policies, strategies and actors <input type="checkbox"/> Key nutrition problems and underlying causes, by group <input type="checkbox"/> Nutritionally vulnerable beneficiaries, by group	
Theory of change	<input checked="" type="checkbox"/> Gender policy objectives (empowerment, voice, workload) <input checked="" type="checkbox"/> Gender transformative pathways <input checked="" 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 type="checkbox"/> Nutrition pathways <input type="checkbox"/> Causal linkage between problems, outcomes and impacts	
Logframe indicators	<input checked="" type="checkbox"/> Outreach disaggregated by gender <input checked="" type="checkbox"/> Women are > 40% of outreach beneficiaries <ul style="list-style-type: none"> • Pro-WEAI indicator 	<input checked="" type="checkbox"/> Outreach disaggregated by age	<input type="checkbox"/> Outreach disaggregated by gender <ul style="list-style-type: none"> • Further details to be confirmed 	
Human and financial resources	<input checked="" type="checkbox"/> Staff with gender TORs <input checked="" type="checkbox"/> Funds for gender activities <input checked="" type="checkbox"/> Funds for Pro-WEAI surveys in M&E budget	<input checked="" type="checkbox"/> Staff with youth TORs <input checked="" type="checkbox"/> Funds for youth activities	<input type="checkbox"/> Staff or partner with nutrition TORs <input type="checkbox"/> Funds for nutrition activities	IFAD Adaptation Finance \$24,716,000 IFAD Mitigation Finance \$0 Total IFAD Climate-focused Finance \$24,716,000
ECG Remarks	<p>Gender</p> <p>Ready to be validated as gender transformational</p> <p>Nutrition</p> <p>Youth</p> <p>Ready to be validated as Youth sensitive</p> <p><input type="checkbox"/> No social inclusion themes</p>			



Investing in rural people

China

Hunan Rural Revitalization Demonstration Project

Project Design Report

Annex: Annex 12_Technical Assessment of 'New Professional Farmers Development Program'

Mission Dates: 27/04/2020 22/05/2020

Document Date: 12/10/2020

Project No. 2000002359

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Technical Assessment of 'New Professional Farmers Development Program'

A. Overall Description of the Program

New Professional Farmer Development Program is part of the government long-term strategy for agricultural modernization, national food security and poverty reduction. The Program was officialized during the 13th Five Year plan (2015-2020), through a Development Plan for Professional Farmer Training. The plan outlined the guiding principles, development targets, implementation guidelines, priority focuses as well as supportive measures and resources.

It is a national program covering all the country, implemented by the local authorities (counties and provinces), with central fiscal budget support. The purpose is to provide capacity development to a variety types of farmers, who choose farming as a profession, to allow them to be more productive, knowledgeable, skillful in the wake of agricultural modernization and transition. This would contribute to the agricultural development and food security, household income increase and poverty reduction, rural economic development and ultimately rural revitalization.

A.1 National Context and Rationale of the Program

China was traditionally an agriculture dominated country. It has a sizeable rural population whom, due to the resident registration system, could hardly move out of the rural category from generation to generation. The rural residents are mostly called farmers as profession, other than those pastoralist and fishermen, At the time of China's opening up and start of the rural reform in 1978, there were 790 million rural population or 80.2% of the country total. It reached a peak of 859 million in 1995. Then the remarkable social and economic development of the country rapidly promoted restructuring of the economy, with the secondary and tertiary industries absorbing large amount of rural labourers to towns and urban areas. Urbanization process also quickly took lift. Share of agriculture sector in national GDP has also quickly reduced, to less than 10% by 2018. Rural population dropped below 50% of the total in 2011. As of today, the urbanization rate of China has reached around 60% (as of 2019) and is further projected to increase to 71% by 2050. Despite many still being registered as rural residents, farmer as a profession is no longer a given destiny but a choice for some of them. Annually around 250 million the so called farmers are migrant workers engaging mostly in non-farm activities.

The agricultural sector is however still very important to the country, first and foremost for the sake of food security that China would like to maintain basic self-reliance. The increasing out-flow trend of rural labourers is already causing structural and seasonal shortage of labor force to manage agricultural production. The situation is further exacerbated by an ageing farming population which also means low knowledge and outdated skills in the wake of gradually modernized agricultural production. Nurturing

and maintaining an adequate number of professional farmers to support the agricultural sector and ensure long-term food security of the country became a strategic choice of the country. Meanwhile, government's vision of eradicating absolute poverty by 2020 also calls for agro-industry led approach to maximize the profit margins of the agricultural sector, so it can bring additional income to rural households especially those poor.

In such context, the government called for the promotion of professional farmers and started to introduced a new professional farmer training program from around 2012 in selected provinces. The new professional farmers training development program was officialised as part of china overall efforts to eradicate poverty and boost rural economy through the 13th five-year plan (2016-2020) ¹, for which a specific Development Plan for Professional Farmer Training was made. In general, the Program aims to promote three categories of professional farmers for production management, special skills and social services.

From the perspective of poverty eradication, the Chinese government has a well-funded and comprehensive poverty reduction strategy and program under the State Council Leading Group Office of Poverty Alleviation and Development of China (LGOP), established in 1986. LGOP plays the lead role in orchestrating a wide range of rural poverty reduction programs, which seek to achieve China's hallmark "development-oriented poverty reduction."

For the core poverty reduction program and developing rural economy, the 2011 Outline of Poverty Reduction Strategies introduces or expands the following five LGOP "signature" approaches 1) National Poor Registration System, 2) Poverty Reduction through Agribusiness Enterprise Development (Chanye Fupin), 3) Voluntary Resettlement Program 4) Poverty Reduction through Employment, which includes the improvement of various vocational training programs and development of professional farmers ; and 5) Rural Financial Services. Professional farmer training is also embedded in approaches No. 2 and 4., as skill training for poor rural households has been an historically an important avenue for escaping poverty in China.

While there is also farmer skills training programs at national and provincial level for off-farm employment as part of the poverty reduction approaches given the non-farm income source contributing significantly to household income, the New Professional Farmer Training Program provide skills for improved farming productivity and services. It trains those who will stay in the agricultural sector and/or rural areas. Specifically, the Ministry of Agriculture (MOA) initiated the New Professional Farmers Development Program in 2014 with the objective of making farming a more attractive profession and

¹ The 13th Five-year Plan for Economic and Social Development of the People's Republic of China (2016-2020), Compilation and translation Bureau, Central Committee of the Communist Party of China, Beijing, China.

as a basis for local economic development. The New Professional Farmers Development Program is aligned with the local agricultural industrialization activities, albeit there is a room to enhance its poverty and gender focus. Given the novelty of this program, the coverage of participating farmers is still relatively small.

The program has identified two major challenges:

Firstly, there is a wide gap in urban-rural development and urban centers are still magnetic for rural surplus labour. The continued decline of agriculture shares in national economy and rural household income, the rural labour force is leaving agriculture production sector and migrating to cities. The new professional training program will cater to needs of modern agriculture techniques and provide robust foundation to rural labour force to stay with agriculture sector.

Secondly, there is shortage of high agri-tech teachers, professionals and agriculture business incubations centers to support the farmers and cater their needs. This program will plan an important role in training the young farmers and creating a fleet of about 20 million professional farmers in the country.

With the launching of the program, all related ministries including Ministry of agriculture have stepped up their efforts in establishing the system and making significant progress in the cultivation of new types of professional farmers, which aimed at building a contingent of 20 million trained professional farmers.

Following development effectiveness is foreseen while developing the professional training program.

- i. A leading force in modern agriculture with highly skilled young farmers, family farmers, cooperative leaders, returnee migrant workers.
- ii. The new farmers training will result in demonstration of inclusive, innovative, and high-tech agriculture development in country.
- iii. The program will play an important role in establishing and strengthening agricultural schools, agriculture research institutes and farmers cooperatives.

Following key indicators are set to achieve the target of new type of professional farmers training program.

Key indicators for the cultivation and development of new type of professional farmers in the "13th Five-Year Plan"				
Index	2015	2020	Average annual growth	Metric properties

Number of new professional farmers' teams	12.72 million	20 million	1.46 million	Anticipated
Percentage of high school education and above	30%	35%	1 percentage point	Anticipated
Number of modern young farmers cultivated	13,000	s63,000	10,000	Binding
Number of training for rural practical talentleaders	67,000	167,000	20,000	Binding
Number of trainings for large agricultural machinery households and leaders of agricultural cooperatives	Demonstration training	50,000	10,000	Binding
Number of training for leaders of new agricultural operators	Demonstration training	The leader of the main body of new agricultural operation basically receives a training	600,000	Anticipated

Online education and training	Pilot	Improve the online education platform, carry out online training courses not less than 30% of the total training courses;	6%	Anticipated
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A.2 Provincial Context

Hunan is important province in agricultural production. Though staple food is not front ranking among the provinces, the provinces has a rich diversity of cash crops and contribute significantly to national diet. Hunan is one of the biggest paddy rice producing provinces in China. The grandfather of hybrid rice Prof. Yuan Longping also hometowns in Hunan. Hunan is also among the top citrus fruit producers in the country. Cash crops contribute more significantly to household income and local economy.

With the launching of the Chinese Central Government's No.1 Document on February 4, 2018 on the *Implementation of the Strategy of Rural Revitalization*, the province of Hunan called for an accelerated effort to invest in new professional farmers as a critical step to boosting agricultural development, rural revitalization and ending extreme poverty. As the document highlighted that building capacity of knowledgeable and skilled farmers is the fundamental force for improving agricultural productivity and innovation and improving the quality of rural employment, the Hunan department of agriculture, aligning with central document, has proposed several measures to improve the New Professional Farmers Development Program, such as supporting farmers to engage in secondary or tertiary vocational education activities on part-time basis and encouraging farmers' cooperatives and leading enterprises to provide training to its associated farm households.

In the province, the New Professional Farmers Development Program currently includes **seven categories of** training catered to the needs and background of different training recipients. The following table provides an overview of the various training options²:

No.	Training categories	Focal trainees	Training institutions	Duration of training
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² This remote design prevents a more in-depth assessment and verification of the features of this New Professional Farmers Development Program. A field-based assessment of the implementation agencies, guideline and curricula implementation and interviewing of trainees is required before implementation would go ahead.

1	Production and operation	Heads of family farms	County-level agricultural schools or other service providers	15 days (including practice time)
2	Professional skills	General farmers	County-level agricultural schools or other service providers	7 days (including practical internship time)
3	Professional services	General farmers	County-level agricultural schools or other service providers	7 days (including practical internship time)
4	Precision Training in the Agricultural Industry	Focused on poverty households	County-level agricultural schools or other service providers	5 days (including practical internship time)
5	Production-oriented rotation training	Leaders in family farms, farmers' cooperatives, micro-agricultural enterprises, etc.	Various units of the Agriculture and Rural Affairs Office	7 days of concentration
5	Young Farmers (Youth Training for Modern Entrepreneurship and Innovation)	Family farm operators, backbone staff of farmers' cooperatives, college students, middle-level and higher vocational graduates, returning migrant workers and veterans	Provincial Department of Agriculture and Rural Affairs procures services through public tender, generally implemented universities	7 days of concentration
6	Agricultural Manager	Focus on the selection of agricultural enterprise managers or department managers, village committee cadres, family farmers, farmer cooperative leaders, heads of agricultural social service organizations, returnees to the countryside as entrepreneurs and other personnel	Provincial Department of Agriculture and Rural Affairs procures services through public tender.	7 days of concentration
7	Education for academic upgrading	Leader of new economic entities, agricultural management staff, members of village committees, and leader of rural social service organizations	Suitable educational institutions	Two academic years, four semesters, 7 days per session

B. Strategic relevance of Program

The 13th five year poverty reduction plan states that skills training of rural population is one of the priority activities for reducing poverty. In the Speeding Up the New Professional Farmers Development Program and the Implementation Plan for the New Professional Farmer Development Program (2015 and 2017 respectively) by national and provincial government, the New Professional Farmers Development Program had been identified as one of key programs for poverty reduction and a set of regulations had been established. The Hunan provincial government included the new professional training program in the Consolidated Poverty Reduction Fund (CPRF), albeit its funding levels have been very low, reflecting the relative novice of this program. Therefore, the allocation of consolidated funds to the program reflects the Hunan provincial government's commitment to lifting the poor and disadvantaged population out of poverty through skills development.

Another document launched by The Chinese Central Government as No.1 Document 'the Implementation of the Strategy of Rural Revitalization' on February 4, 2018 called for an accelerated effort to invest in new professional farmers as a critical step to boosting agricultural development, rural revitalization and ending extreme poverty. The document highlighted that building capacity of knowledgeable and skilled farmers is the fundamental force for improving agricultural productivity and innovation and improving the quality of rural employment. The document proposed several measures to improve the New Professional Farmers Development Program, such as supporting farmers to engage in secondary or tertiary vocational education activities on part-time basis, and encouraging farmers' cooperatives and leading enterprises to provide training to its associated farm households.

The proposed Program-RBL would support the government in scaling up the number of farmers participating, and getting accredited, under the New Professional Farmers Development Program, by encouraging county government to increase funding allocation for this skills training program from its CPRF budgets. It would also encourage the counties to increase the share of woman in the skills training programs and favor younger farmers. The CPRF budgets could be used for capacity building for the training institutes including training of teachers and instructors on curriculum development and teaching methods, and to encourage knowledge-sharing activities to promote better program implementation in the targeted counties.

C. Technical Soundness of Program

The New Professional Farmers Development Program was initiated by the Ministry of Agriculture (MOA) in 2014 with the objective of making farming a more attractive profession in China as a basis for local economic development in rural areas. The program had evolved from the previous Sunshine Program, but shifting from training

rural farmers for off-farm employment to increasing farming income at their home locations. The program has solid design, which consists of three phases of 15-days training, accreditation of the professional farmer certificate, and continuous technical follow-up support.

It has been implemented by the Department of Agriculture and Agricultural Broadcasting and TV Schools at provincial and county levels, based on an integrated nationwide management information system, including databases of trainees, trainers and teaching materials, as well as a cloud platform for information sharing. In Hunan the program has been implemented at county levels with the overall guidance and management from the DOA since 2014. The training undertaking institutions were selected based on qualifications and track record.

In the 10 Project counties, 23500 farmers were trained with modern agriculture farming. Among them 48% were women while 55% were youth. The project are trained farmers included only 2381. In Luxi County, the program developed the training at different levels -- training in vocational school and agricultural school, and field practical training. In Guzhang County, the trainings were allocated to different agencies for different topic, such as agricultural techniques by agricultural bureau, other specialized skills by employment bureau, housekeeping skill by women’s federation, and dozens of qualified farmers were sent to one year training in Hunan Agricultural University every year. In Longshan County, farmers were trained in Chinese Academy of Agricultural Science, Jishou University and Hunan University for different periods from several days to three months. However, the coverage of new-type professional farmer training program was small and great differ of scale county by county (Table 14). In national and provincial level poverty counties, the program is implemented at the county level and funded through the Consolidated Poverty Reduction Funds (CPRF) budget with no prior earmarked funds for training. While the consolidate budget sufficiently large, most counties consider it more attractive to use the consolidated funds for more visible investments (e.g. infrastructure, housing, subsidization of production, etc.). The professional farmer training is given insufficient priority.

These numbers are still rather low and indicate a significant scope for scaling up in order to deepen the impact of this program. Most of these trainees have been involved in the establishment and running of farmers cooperatives. As such, the New Professional Farmers Development Program could contribute directly to agricultural industrialization as the farmer trainees could potentially become the leading force behind the development of farmer cooperatives.

**New-type professional farmers training in project area and project counties
(2018)**

County	# of trainee		% of trainee among labor		% of women		% of youth	
	Project	Project	Project	Project	Project	Project	Project	Project

	county	area	county	area	county	area	county	area
Shimen	419	9	0.11%	0.10%	6.21%	NA	16.23%	33.33%
Taoyuan	450	4	0.09%	0.04%	32.89%	25.00%	16.89%	25.00%
Guzhang	120	15	0.14%	0.17%	34.17%	53.33%	100.00%	100.00%
Fenghua ng	10,000	429	4.80%	3.88%	50.20%	50.82%	62.58%	61.77%
Luxi	660	87	0.47%	0.66%	12.27%	10.34%	60.45%	63.22%
Longshan	382	128	0.21%	1.74%	46.60%	42.19%	100.00%	93.75%
Shaodon g	300	NA	0.06%	NA	30.67%	NA	42.67%	NA
Daxiang	188	35	0.31%	0.48%	40.43%	42.86%	69.15%	60.00%
Longhui	6,234	474	1.29%	3.12%	40.01%	39.66%	33.06%	79.32%
Rucheng	4,749	1,200	1.90%	7.40%	66.33%	43.42%	72.44%	66.33%
Total/ Average	23,502	2,381	0.84%	2.42%	48.11%	42.59%	54.61%	69.19%

The Hunan has taken a number of institutional enhancement steps to improve the effectiveness of the New Professional Farmers Development Program and to make it more pro-poor in the past years including: (i) formulating more detailed guidelines for the program implementation, including fund allocation and M&E system; (ii) promoting more market-driven and needs-based training activities which are more closely aligned with local Chanye Fupin development efforts; (iii) explicitly engaging poor households from the NRPS by setting 10 percent target for trainees from registered poor households; and (iv) giving counties more flexibilities on selecting training institutes.

Hunan has committed to significantly scale up the program over the RBL-program period under their CPRF budgets, with the aim to increase **almost ten times** the number of farmers completing this skills training program by 2026,

The technical assessment determined that the New Professional Farmers Development Program has solid design, functions well at county level, is aligned with agricultural industrialization activities, and has started to have a more explicit poverty focus. There is an anecdotal evidence that trainees who have participated in the program have contributed to local agricultural development and poverty reduction, although more formal evaluations are still lacking. The main shortcoming of the program so far is: (i) relatively small coverage of farmers, largely due to its novelty; and (ii) lack of explicit poverty or gender targeting, until recently. The proposed RBL-Program aims to incentivize counties to allocate more of the CPRF budget for the New Professional Farmers Development Program, increasing thus the number of women farmers participating, and getting accredited. It would also encourage the counties to increase the share of registered poor and youth in these skill training activities. In order to further improve the effectiveness of the program, the technical assessment

makes the following recommendations, which are aligned with the Program's Guideline and the No.1 Document: (i) continue to build capacity for the training institutes including training of teachers and instructors on curriculum development and teaching methods, equip the institutes with necessary training equipment and facilities, especially for field schools and/or hands-on training bases; and (ii) organize knowledge-sharing activities at provincial level to promote better program implementation at all counties.

While the program is well established in Hunan and its contents is continuously reviewed and revised, the program faces three problems:

- 1) Coverage of the professional farmer training program. In national and provincial level poverty counties the program is implemented at the county level and funded through the Consolidated Poverty Reduction Funds (CPRF) budget with no prior earmarked funds for training. While the consolidate budget sufficiently large, most counties consider it more attractive to use the consolidated funds for more visible investments (e.g. infrastructure, housing, subsidisation of production, etc.). In 2019, the ten project counties together trained a total number of 2,250 farmers with significant variation amount counties ranging from 42 in Rucheng to 505 in Shimen county. Most counties have significant scope to enlarge the program.
- 2) Gender Prioritisation. The outmigration of male migrant workers leaves many farm households de-facto operated by women farmers. Women not only have to do most of the physical farm work, they also have to manage the farm's business operations, decide on the choice of products, buying and selling, investment decisions, participate of manage farmer cooperatives, join meetings, etc. In turn women not appropriately prepared for these tasks are particularly vulnerable even to the point that they are giving up the land. It is therefore critical to pay specific attention involving as many women farmers in the farmer professional training program. In 2019, the average percentage of women among all project counties was 29.2%; again, with significant variation ranging from 11.3% (Shimen) to 48.1% (Daxiang).
- 3) Age Composition. The program aims to train particularly young candidates in their 30s or early 40s. However, this is not always achieved. Professional positions in farming or along farming businesses are not considered attractive for the younger generation. This stands in contrast to the strategic objective of the rural industrialisation agenda of getting more young people back as professionals in the rural areas. In 2019, the average age of the trainees was 46 years varying between 39 years in Guzhang and 51 years in Shimen.

Data on Professional Farmer Education Training (MARA/DARA-Program) formally called 'New Types of Professional Farmer Training' 职业农民教育培训 (农业农村部门项目) 原来叫做新型职业农民培训 数据														
湖南省项目办														
County项目县	2019					2018					2017			
	No.颁发证书数量	Percent of Women妇女比例	no of women estimate	Percent of Archived Poverty HH 建档立卡贫困户比例	no of poor estimate	trainees (years) 被培训人员平均年龄 (岁数)	No.颁发证书数量	Percent of Women妇女比例	Archived Poverty HH 建档立卡卡贫困户比例	of trainees (years) 被培训人员平均年龄 (岁)	No.颁发证书数量	Percent of Women妇女比例	Archived Poverty HH 建档立卡贫困户比例	Average age of trainees (years) 被培训人员平均年龄 (岁数)
Shaodong 邵东	200	47.5%	95	51.0%	102	48	300	30.67%	28.33%	46	200	42%	22.50%	47
Taoyuan 桃源县	414	20.0%	83	1.2%	5	45.5	450	32.80%	0.40%	42.7	457	25.40%	0.20%	45.1
Fenghuang 凤凰	64	17.0%	11	70.0%	45	45								
Guzhang 古丈	136	44.0%	60	39.0%	53	39	120	41	37	41	176	47	37	33
Longhu 隆回	173	16.0%	28	64.0%	111	42.5	222	26%	66%	42	120	10%	70%	40
Luxi 泸溪县	320	46.2%	148	56.4%	180	44.5	300	53%	61%	46.6	240	48%	57%	46.5
Rucheng 汝城县	42	30.9%	13	11.9%	5	42	83	44.6	12	41				
Shimen 石门县	506	11.3%	57	13.7%	69	51	419	8.90%	7.90%	53	339	5.30%	6.70%	55
Longshan 龙山县	345	40.0%	138	60.0%	207	43	181	35%	54%	46	150	32%	52%	45
Daxiang district 大祥区	50	48.1%	24	65.0%	33	43	50	15.09%	60%	38	50	40%	55%	43
Average 10 counties	2250	29.2%	657	36.0%	810	46.0	2125							

D. Program-RBL Implementation Process and Arrangements

Given the fact that the training program exists and can be funded under the Government's CPRF, it is not considered efficient to use IFAD resources to set up its own project specific training program to train additional farmers, include more women or more younger people. The project would build on the Government's program and use a Results Based Lending (RBL) approach to incentivise the county Government for: a) scaling up the number of farmers participating, and getting accredited, under the Professional Farmers Training Program, by encouraging county governments to increase funding allocation for this skills training program from its CPRF budgets, b) increasing the proportion of women in the program by stepping up efforts and attract more women participating, and c) attract a higher proportion of younger people for this program. This approach would be more cost effective since the allocation of IFAD funds provided as an incentive could stay well below the actual costs of the training. The project aims to scale up the program by at least an additional 1,000 per year successfully trained New Professional Farmers, reaching a proportion of women of at least 45% for the entire program by 2023 and lowering the average age again for the entire program to not more than 40 years by 2023. To achieve these outcomes the project follows an RBL approach using the following three Disbursement Linked Indicators (DLIs).

DLI_1 Incremental number of farmers completing the New Professional Farmer Development training program: The DLI is defined as additional number of farmers who complete the New Professional Farmer Development Program in 10 project counties, where the New Professional Farmers Development Training Program" means the training program managed by Hunan Provincial Department of Agriculture, in accordance with the respective guidelines.

Baseline and Formula: The incremental number is calculated using the Baseline of the year 2019 and deducting the actual number of candidates successfully completing the training in any year from 2021 to 2025 minus the baseline number from 2019 in any of the 10 project counties.

Per unit value (pricing) and total value: The unit value for each additional trainee is set at US\$ 300. With an additional 5,000 trainees (over 5 years) to total expected disbursement would be US\$ 1.5 million.

DLI_2 Incremental number of women completing the New Professional Farmer Development training program: The DLI is defined as additional number of women farmers who complete the New Professional Farmer Development Program in 10 project counties.

Baseline and Formula: The incremental number is calculated using the Baseline of the year 2019 and deducting the actual number of women successfully completing the

training in any year from 2021 to 2025 minus the baseline number of women trained in 2019 in any of the 10 project counties.

Per unit value (pricing) and total value: The unit value for each additional women trainee is set at US\$ 200. With an additional 2,100 trainees (over 5 years) to total expected disbursement would be US\$ 0.42 million.

DLI_3: Reduced age of the trainees completing the New Professional Farmer Development training program.

Baseline and Formula: The reduction in age if the trainees is calculated using the Baseline age of the year 2019 (number trainees in 2019 time average age in 2019), which is deducted from the actual number of trainees times the average age in any year from 2021 to 2025 in any of the 10 project counties.

Per unit value (pricing) and total value: The unit value for each year in the total age of the trainees is set at US\$ 10. Reaching an average age of 40 years would result in total reduction of 71,500 years and the total expected disbursement would be US\$ 0.715 million.

The targets and expected disbursement values aggregated for the 10 project counties are shown in Table below . Each county has individual targets based on their current situation. E.g. a county with an already large program but comparatively low proportion of women and/or high average age (e.g. Shimen) would receive less or no funds for scaling up but most or all of the funds for changing gender proportion an/or age composition.

Cost Table for Farmer Training Program (RBL disbursed component) Overall Project 10 counties						
	unit	2021	2022	2023	2024	2025
Number of trainees /a)						
Baseline (2019)	no.	2,250	2,250	2,250	2,250	2,250
Incremental number of trainees (DLI_1)	no.	1,000	1,000	1,000	1,000	1,000
Total Trainees	no.	3,250	3,250	3,250	3,250	3,250
Proportion of Women Trainees entire program /b)						
Baseline (2019)	percent	29.2%	29.2%	29.2%	29.2%	29.2%
Incremental proportion of women	percent	35%	40%	45%	45%	45%
Incremental No. of women trainees (rounded) (DLI_2)	no.	189	351	514	514	514
Average age of trainee entire program /c)						
Baseline average age (2019)	years	46	46	46	46	46
Target average age	years	45	43	40	40	40
Reduction in age of trainees (DLI-3)	years	3,250	9,750	19,500	19,500	19,500

a) Currently (2019) 2,250 farmers are trained and receive a certificate for successfully concluding the training. The project would aim to scaled up the training program and disburse US\$ 300 for each additional trainee (DLI_1).

b) Currently (2019) 29.2 percent of all trainees are women. The program would aim to increase the proportion of women gradually to at least 45%. The project would disburse US\$200 per each additional women trainee calculated by the achieved percentage minus the baseline percentage (DLI_2).

c) Currently (2019) the average age of the all trainees is 46 years. The program would aim to focus the program more on younger trainees and reduce the average age of the

trainees gradually to not more than 40 years. The project would disburse US\$10 per each year in the total age of the trainees as compared to the baseline average age (DLI_3).

d) The DLIs are independent (e.g. if DLI_1 is not achieved or not fully achieved DLI_2 or DLI_3 can still be achieved and vice versa). The DLIs are also scalable and can be partially achieved or over-achieved, in which case the project implementing agencies together with IFAD will further decide on fund allocations. Before disbursement reported numbers would be verified through a detailed random verification process explained in the verification protocol.

Verification protocol: The achievement of the DLI_1, DLI_2 and DLI_3 as defined above will be recorded semi-annually by the Hunan Provincial Project Management Office (PPMO) based on reports by the project county PMOs. The PPMO will report the data to a third-party Verification Agency (VA) for verification. The verification review will be done against Program Guidelines approved by Hunan [*specific document yet to be identified*]. It will require the review of relevant training documents from randomly selected 2 counties, which will be repeated for each disbursement period for new set of counties. In each randomly selected county, the verification will then randomly select 20 percent of the reported trainees having successfully completed the *New Professional Farmer Development training program*. For each randomly selected trainees a survey will also collect household information on the following variables: gender of the head of the household, poverty status, training content, method and organization of training, process, result and usefulness of accreditation/certificate, satisfaction with the services provided, frequency and relevance of continuous support, management of the whole program. However, only the evidence on the confirmation of the person's completion of the New Professional Farmer Development Program, the gender and the age will be used to verify DLI disbursement values. The rest of the information collected from beneficiary surveys will be used for the purposes of tracking the implementation progress of the program, including the Log-Frame indicators, which will be monitored through routine supervision missions. Verification that a DLI target has been achieved would be through a letter of confirmation to the IFAD.

IFAD Disbursement: IFAD disbursement will be triggered by a *letter of confirmation* to be forwarded to IFAD on a semi-annual basis and supported by the corresponding list of trainees certified by the VA.

E. Institutional Structure and arrangements

The project would build on the Government's program and use a Results Based Lending (RBL) approach to incentivize the county Government for: a) scaling up the number of farmers participating, and getting accredited, under the Professional Farmers Training Program, by encouraging county governments to increase funding allocation for this skills training program from its CPRF budgets, b) increasing the proportion of women in the program by stepping up efforts and attract more women participating, and c) attract a higher proportion of younger people for this program. Since the design of this component was largely based on some preliminary assessment at the concept stage followed by virtual meetings/discussions during the time of COVID-19 travel restrictions, a more in-depth field based technical assessment is required. The IFAD design team would re-confirm the technical aspects of the Training Program including a review of the most recent curricula, assessment of the training institutions and interviewing selected trainees. Lists of trainees would need to be verified to confirm the baseline data. Such re-confirmation would be made conditional for disbursement under this sub-component.

The institutional arrangements:

DARA will:

- *Issue a guiding document* explaining the approach and guiding the counties on the implementation procedures.
- *Prepare a Recording Format* for the counties covering relevant information about the program implementation including detailed data for each of the trainees.
- *Contract a Verification agency.* The provincial PMO will prepare the TOR and recruit a third-party verification agency acceptable to IFAD, which would verify the reported information about the training program.

The county PMOs:

- *Awareness raising;* the county PMOs will raise awareness among the implementers of the training program on current shortcomings in terms of gender age and scale in their respective counties.
- *Develop strategies to address shortcomings;* the county PMOs will develop strategies and specific measure to reach out and encourage more women and more younger people to enroll in the training program.
- *Reporting successful trained participants;* the county PMOs will report all trainees, which have successfully concluded the training confirmed by certificate to the PPMO, which in turn will inform the VA and request verification.

Verification Agency:

- *Field verification:* The verification review will be done against Program Guidelines approved by Hunan [*specific document yet to be identified*]. It will require the review of relevant training documents from randomly selected 2 counties, which will be repeated for each disbursement period for new set of counties. In each randomly selected county, the verification will then randomly select 20 percent of the reported trainees having successfully completed the *New Professional Farmer Development training program*. For each randomly selected trainees a survey will also collect household information on the following variables: gender of the head of the household, poverty status, training content, method and organization of training, process, result and usefulness of accreditation/certificate, satisfaction with the services provided (this will be tracked also as an indicator of citizen engagement), frequency and relevance of continuous support, management of the whole program. However, only the evidence on the confirmation of the person's completion of the New Professional Farmer Development Program, the gender and the age will be used to verify DLI disbursement values. The rest of the information collected from beneficiary surveys will be used for the purposes of tracking the implementation progress of the program, including the Log-Frame indicators, which will be monitored through routine supervision missions.

IFAD Disbursement:

- IFAD disbursement will be triggered by a *letter of confirmation* to be forwarded to IFAD on a semi-annual basis and supported by the corresponding list of trainees certified by the VA.



Investing in rural people

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Hunan Rural Revitalization Demonstration Project

Project Design Report

Annex: Annex 13_Environmental and Social System Assessment (ESSA) for Sub-component A.3

Mission Dates: 27/04/2020 22/05/2020

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China–Hunan Rural Revitalization Demonstration Project (H2RDP) Environmental and Social System Assessment (ESSA) for Sub-component A.3

Under Sub-component A.3, the project will promote gender sensitive professional farmer training through a programmatic Results Based Lending (RBL). The project will provide incentives to the county governments to give higher priority in their New Professional Farmer Training Program to women (and to allocate more budget resources under this program). The disbursement would pilot a result-based lending (RBL) approach. The project will disburse a prior agreed amount of resources to the counties' treasury (or project account) for each percentage point of 'women successfully trained in the program' (disbursement-linked indicator) above the 2019 baseline in each county. The agreed amount would be less than the actual training costs, but enough to provide a sufficiently attractive incentive for the counties to up-scale the program and to increase the percentage of women beneficiaries. The IFAD funds disbursed could be used for additional project activities or supplement the county Consolidate Poverty Reduction Funds.

Three Disbursement Linked Indicators (DLI) related to number of trainees, percentage of women trainees and average age have been introduced with baseline and targets estimated based on information collected from the counties. Disbursement will be triggered once the targets are met and calculated. For the implementation of this activity, the baseline information will need to be validated during the project baseline survey, the project M&E system will need to adequately cover these indicators, a third party will be contracted for perform the validation of results.

Environment and Social Systems Assessment (ESSA)

An Environment and Social Systems Assessment is carried out to understand the social, environment and climate risks and impacts likely to be generated from implementing sub-component A.3. The assessment also aims to identify social, environmental and climate aspects that could benefit from strengthening the existing systems associated with the sub-component. The ESSA was conducted within the framework of the six Core Guiding Principles of RBL, (i) General Principle of Environmental and Social Management, (ii) Natural Habitats and Physical Cultural Resources (PCR), (iii) Public and Workers Safety, (iv) Land Acquisition and Loss of Access to Natural Resources, (v) Indigenous Peoples and Vulnerable Groups, and (vi) Social Conflict,

The ESSA was carried out at the county levels. The objectives were to understand: a) how environment and social concerns are addressed in the policy framework, b) the relevance of different legal and regulatory provisions; c) the roles and responsibilities of the various stakeholders involved in implementation of sub-component A.3, and d) the capacity and performance of key institutional stakeholders.

Applicability of ESSA core principles

Core Principle 1 *Environmental and social management procedures and processes are designed to (a) promote environmental and social sustainability in the program design; (b) avoid, minimize, or mitigate against adverse impacts; and (c) promote informed decision-making relating to a program's environmental and social effects.*

The sub-component is classified as Category C as it entails building capacity in the form of training delivered to farmers with increased participation of women, and will not generate any adverse social, environmental and climate risks and impacts.

Core Principle 2 *Environmental and social management procedures and processes are designed to avoid, minimize, or mitigate adverse impacts on natural habitats and physical cultural resources resulting from the Program*

This principle is not applicable. Interventions proposed under the sub-component would not impact natural habitats and physical cultural resources.

Core Principle 3 *Environmental and social management procedures and processes are designed to protect public and worker safety against the potential risks associated with: (i) construction and/or operations of facilities or other operational practices under the Program; (ii) reconstruction or rehabilitation of infrastructure located in areas prone to natural hazard.*

This principle is not applicable. The sub-component is classified as Category C as it entails building capacity in the form of training and will not generate any adverse social, environmental and climate risks and impacts. The training provided to Professional Farmer Program will include awareness on public and worker' health and safety.

Core Principle 4 *Manage land acquisition and loss of access to natural resources in a way that avoids or minimizes displacement, and assists the affected people in improving, or at the minimum restoring, their livelihoods and living standards.*

This principle is not applicable. Interventions under sub-component A.3 will not involve any land acquisition.

Core Principle 5 *Give due consideration to the cultural appropriateness of, and equitable access to, program benefits, giving special attention to the rights and interests of the Indigenous Peoples and to the needs or concerns of vulnerable groups.*

This principle is not applicable. The sub-component will yield significant social benefits to the local community members or farmers, particularly in the ten (10) counties where the Professional Farmer Training Program will be implemented.

Core Principle 6 *Avoid exacerbating social conflict, especially in fragile states, post-conflict areas, or areas subject to territorial disputes.*

This principle is not applicable. By its very nature, the sub-component intends to increase the number of women participating vulnerability of farmers to climate related shocks and distress from crop failure. It, therefore, intends to lower any likelihood of social conflict or unrest.

ESSA Findings on Relevant Legal, Regulatory and Institutional Framework

The ESSA has analysed the existing legal, regulatory and institutional framework at both the national and county levels. The *Law of the People's Republic of China on Environmental Protection* (executed on December 26, 1989 and revised on April 24, 2014) protects the environment, promotes environmental management, prevents pollution and promotes sustainable development. The *Law of the People's Republic of China on Evaluation of*

Environmental Impact (executed from September 1, 2003 and revised on July 2, 2016), guides on the analysis, prediction, evaluation and prevention from possible environmental impacts arising from planning and construction of projects, and includes mitigation of adverse environmental impact, and systems for tracking and monitoring. The *Law of the People's Republic of China on Soil and Water Conservation* (executed from June 29, 1991 and revised on December 25, 2010) is designed to prevent and control water and soil loss, protects and promotes utilization of land and water resources, reduction of water, drought, wind-sand disasters, improvement of ecological environment. The *Law of the People's Republic of China on Land Management* (executed from January 1, 1987 and revised on August 28, 2004) is a national law developed for the enhancement of land and promotion of sustainable development.

Grievance Redress Mechanism

The government in the Hunan province has established an integrated petition system to ensure citizens have unimpeded channels to express their concerns and grievances. The system is guided by the *Petition Ordinance (2006)* which allows citizens, legal representatives or other organizations to use communication channels such as letters, emails, faxes, telephones, and visits to make recommendations or raise complaints to all levels of government structures and subsequently at all levels. The raised grievances are normally addressed by the respective departments receiving the complaints. In line with the Petition Ordinance, each government structure has established a petition department or personnel to be responsible for the petition work. The roles and responsibilities of petition work of governments include: (i) Receiving, handing over or forwarding complaints submitted by complainants to relevant in charge departments; (ii) Undertaking the complaint cases assigned by the government at a higher level; (iii) Coordinating and dealing with important complaint cases; (iv) Supervising the handling of complaint cases; (v) studying and analysing the situation of petition, carrying out investigation and research, and provide suggestions on improving policies and petition work to the government; (vi) guiding the petition work of other government departments at the same level and the petition departments at lower levels.

The Hunan province the regulation requires the establishment of petition agencies at all levels from the township to the provincial level tasked with the responsibility of receiving requests, opinions and concerns from the complainant to ensure their legal rights and entitlement are heard. The Petition Department of the Hunan Provincial is responsible for supervising and reporting complaints, registering, investigating, supervising, replying and filing. Complaints can be made by letter, visiting, telephone, internet, fax or orally. The Hunan provincial and county level Petition Department opens the letter within one working day of receipt, and handing within 3-4 days to relevant authorities. The administrative authorities that have the right to deal with the petition cases shall resolve the matter within 60 days and issue the reply submission to the complainant according to the request. If the case is identified complicated, the time limit may be extended appropriately with the approval of the head of this administrative authorities, but the extension period shall not exceed 30 days. The Hunan province also provides a special channel for rural poor people to report their concerns and grievances.

Women's complaints, Sexual Abuse and Child Labour

The women's federation of Hunan province has a special window for complaints, and has set up WeChat groups of cases such as "women's growth group", "couples' joint debt rights protection group", "child violence" and "sexual abuse". Women's Federations at all levels

provide professional consultation and guidance, and provide rights protection services for women. An online complaint channel has been set up to provide women with legal, psychological, mediation and other public services. In addition, a special hotline for complaints has also been established. Provincial-municipal-county-township level petition mechanism and the mediation mechanism of the disputes have been established in Hunan province. The farmers can raise complaints to local government and workstation such as the Village Committee, township Centre of Comprehensive Management of Stability and Petition and County Petition Bureau. The issues that are able to be mediated should be solved at the community level; and the issues that cannot be solved at the community level can be escalated to the county compliant bureau, the escalation process works properly. It is concluded that GRM system is effective and working properly in Hunan/project areas.

With regards to child labour the Hunan Province is guided by the *Prohibition of Child Labour (1 October 2002) Law*. The State and Province have formulated a series of comprehensive policies on social risks management which include prohibition of Child and Forced Labour.

Key Issues Identified in the ESSA

- Institutional capacity for implementing sub-component A.3 might likely be low and compounded with skeletal staff deployed at the county level for managing it.
- Lack of coordination between different stakeholders having a disproportionate impact on marginal and small farmers for whom the sub-component is targeting.

Key Recommendations of ESSA

- Undertake targeted capacity building for all service providers
- Strengthen stakeholder engagement and feedback through grievance redressal mechanism

Suggested Actions to be integrated in the project

- Develop a gender strategy, and implementation plan of agreed actions, for targeting and enhancing participation of women farmer owners in the project.
 - Gender study conducted in year 1 in all participating counties
 - Based on the Gender study, gender strategy developed and implementation initiated by year 2
- Make Farmer education part of H2RDP delivery
 - By year 2, select modules for farmer education developed and implemented with significant participation of women.

Proposed Implementation Arrangements:

At the national level, the National Development and Reform Committee (NDRC), the Ministries of Water Resources (MOWR), the Ministry of Transport (MOT) and the State Council Leading Group Office of Poverty Alleviation and Development (SCLGOPAD) is responsible for overall social-economic development planning, irrigation and water resources management, rural roads and poverty reduction respectively. They provide respective policy advice, technical guidance and programme supports to provincial and local governments and relevant institutions.

At the provincial level, the Provincial Development and Reform Committee (PDRC), Department of Water Resources (DOWR), Department of Agricultural and Rural, the Department of Transport (DOT) and the Provincial Government Lead Group Office of Poverty Alleviation and Development (PGLGOPAD) are the line agencies respectively. They issue

provincial sector development strategies, policies, plans and technical guidelines; formulate and implement work and budget plans for provincial government funded programmes and projects.

At the prefecture and county levels, the counterpart agencies are the Bureau of Development and Reform (BODR), the Bureau of Water Resources (BOWR), the Bureau of Transport (BOT) and the County Government Leading Group Office of Poverty Alleviation and Development (CGLGOPAD) respectively. They formulate and implement prefecture and county level sector development plans and projects, review and approve system planning and project designs for relevant investment activities, supervise their implementation, and advice system operation and management.

Various research, education and consultancy institutions at different levels in the area of irrigation, water resources management, agriculture, as well as transport are responsible for providing relevant technical services and capacity building. Water Management Stations and Agricultural Extensions Stations at township level are responsible for water and agriculture services and technical extension at field level. Public and private contractors are contracted for infrastructure construction and technical services following government procurement guidelines. Township Authorities and Village Committees are involved in project identification and planning, mobilization of beneficiary contributions. Village committees, water users' associations, and farmers' cooperatives are responsible for operation and maintenance of village level public infrastructure systems.

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Hunan Rural Revitalization Demonstration Project Project Design Report

Annex: Annex 14_FIDUCIARY SYSTEMS ASSESSMENT

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FIDUCIARY SYSTEMS ASSESSMENT
Hunan Rural Revitalization Demonstration Project
(H2RDP)

September 2020

Draft Copy

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1. Scope

The Fiduciary System Assessment to pilot the Programmatic Results Based Lending approach, as part of the Hunan Agriculture and Rural Infrastructure Development Project (H2RDP), was carried out by the Financial Management Services Division of IFAD in line with the IFAD Results-based Financing Guidance Note 2020.

The scope of the Fiduciary System Assessment for the IFAD Results Based Lending is based on the “New Professional Farmer Development Program” that is part of the Chinese long-term strategy for agricultural modernization, national food security and poverty reduction. The scope considers the 14th five-year plan (2021-2025) that will be rolled out on previous programs and existing strategies to continue the poverty reduction efforts in China.

For the core poverty reduction program and developing rural economy, the 2011 Outline of Poverty Reduction Strategy focuses in five approaches: 1) National Poor Registration System, 2) Poverty Reduction through Agribusiness Enterprises Development, 3) Voluntary Resettlement Program, 4) Poverty Reduction through Employment and 5) Rural Financial Services. Professional farmer training is considered in the approaches 2) and 4), as a skill training for poor rural households of reducing poverty in China.

The “New Professional Farmer Development Program” is implemented at County level and funded through the Consolidated Poverty Reduction Funds (CPRF) budget. This remote assessment considered the Provincial Department of Agriculture and Rural Affairs (DARA), the Hunan Department of Finance, the National Audit Office (NAO) the Hunan Provincial Audit Office and the Counties of the Hunan Province in which the Program is implemented.

2. Review of the Public Financial Management Cycle

2.1 Budget, treasury management and funds flow

Each government level in China prepares a budget following a similar and standardized budgeting process. At the county level, sector entities prepare and submit their budget proposals for operating and capital expenditures to the corresponding technical division of the county Finance Bureau for review. This usually happens in early September. Both operating and capital budgets are reviewed for consistency and alignment with higher-level government priorities and policies. The final budget proposal is presented to the county’s People’s Congress. This is done generally in February. The budget is normally divided in four groups: 1) Operating, 2) Investment, 3) Government fund (social security) and 4) State-owned assets.

The budget preparation process at the county level is structured and timely. Spending quotas for the Poverty Alleviation Program are issued typically in December of the preceding year, so that formal budget approval by the People’s Congress in February of the budget year does not delay the implementation of the programs. The annual budget disaggregates program expenditures by each implementing agency that receives poverty alleviation funds. No overall picture of it can be seen in the annual budgets. To address this issue, a Poverty Alleviation Consolidated Fund (CF) has been piloted in some counties since 2016 with positive results.

The “New Professional Farmer Development Program” is part of the Annual Financial Poverty Alleviation Consolidated Fund Usage Plan (AFUP). Following the Regional 14th five-year plan of poverty reduction, each county needs to prepare a five-year plan of poverty reduction and an investment plan for each year of implementation.

As mentioned above, the annual budget disaggregates program expenditures by implementing agencies. Each county prepares an Annual Financial Poverty Alleviation Consolidated Fund Usage Plan (AFUP), which defines the specific purpose of the funds, location, responsible agency, investment cost, and implementation timeline. Preparation and approval of each county’s AFUP is done in parallel with the preparation of the annual budget.

The leading implementing agency of the “New Professional Farmer Development Program” at the provincial level is the Department of Agriculture and Rural Affairs (DARA), which is in charge of all the agricultural and rural related activities at the provincial level.

Its main responsibilities about farmer’s capacity building are to provide guidance on agricultural education and vocational farmer training activities, organize the development of a new type of vocational farmer employment skills training, and to promote the implementation of professional farmers system in every province.

At the beginning of the year, the Ministry of Agriculture and Rural Affairs (MARA) will approve the consolidated Annual Work Plan and Budget for farmer education and training activities. DARA will circulate the detailed plan and budget to prefectures and counties to start the implementation.

On a monthly basis, funds will be advanced from the Provincial Department of Finance (DOF) to the counties Bureaus of Finance (BOF) according to approved allocations. Each County maintains a Treasury Single Account (TSA) with the possibility to make payments through a network of commercial banks. The County Bureau of Agriculture and Rural Affairs (BARA) will start the implementation usually through farmer training centers or vocational training schools at county or prefectural level. Once the activities are completed, BARA will submit to DARA a completion report for approval. After prefectures and counties complete the training activities, they prepare all the relevant supporting documents to report to their respective Bureau of Finance (BOF) to claim for reimbursement.

For the IFAD RBL purpose, it was assessed that the ideal funds flow model should be to channel the funds through the Provincial Department of Finance (DOF). However, due to the restrictions in receiving foreign bank transfers at the government entities, it is proposed that the funds of the RBL are transferred directly to the Designated Account of the loan of H2RDP, from where the funds will be transferred to the Provincial Department of Finance (DOF) for its allocation to each county according to approved allocations.

For purposes of financial reporting on the Poverty Alleviation Consolidated Fund (CF), each county completes a monthly Excel template provided by DARA. The template combines information on sources of financing and functional expenditures. Counties financial information systems are not designed to provide specific program reporting. Each county, therefore, has devised a way to extract program expenditures from its system to complete the monthly Excel financial report. Counties have been reporting in different formats and providing different information generating inconsistencies among counties in the classification of financial information and difficulties in the consolidation of information. It is recommended that DARA prepares a set of instructions to accompany the template.

DARA should also monitor the preparation of reports and consolidate the information on a monthly basis to reduce inconsistencies.

The departments involved in the “New Professional Farmer Development Program” at provincial level mainly include the Provincial Department of Human Resources and Social Security, the Provincial Poverty Alleviation Office, the Provincial Department of Agriculture and Rural Affairs, and the Provincial Women’s Federation. The specific functions of these departments are advisers and sometimes implementers on specific topics related to their functions.

The Professional farmer training has its own performance evaluation and assessment that is carried out on an annual basis.

2.2 Disbursement trigger and Cashflow

IFAD disbursement will be triggered semi-annually by a letter of confirmation from DARA supported by the Verification Agency report. The project aims to scale up the program by at least an additional 1,000 successfully trained New Professional Farmers per year (from 2021 to 2025). The incremental number of trainees for each DLI is laid down in detail in technical note under section D.

The three DLIs are independent (e.g. if DLI_1 is not achieved or not fully achieved DLI_2 or DLI_3 can still be achieved and vice versa). The DLIs are also scalable and can be partially achieved or over-achieved.

In the scenario of over-achievement in the targets on a specific semester, the disbursement will proceed based on the actual achievement. If the overachievement is recurrent, it could exhaust the total IFAD Financing earlier than envisaged, in this case, the RBL will be terminated when the total IFAD financing is exhausted.

In the scenario of underachievement in the targets on a specific semester, the disbursement will be based on the report made by DARA, and the balance remaining for that semester will be transferred to the next one.

The total IFAD financing will be maintained as a ceiling.

The indicative disbursement schedule will be as follows:

DLI	2021		2022		2023		2024		2025		Total
	1st semester	2nd Semester									
DLI_1	150000	150000	150000	150000	150000	150000	150000	150000	150000	150000	1500000
DLI_2	18900	18900	35100	35100	51400	51400	51400	51400	51400	51400	416400
DLI_3	16250	16250	48750	48750	97500	97500	97500	97500	97500	97500	715000
											2 631 400

The RBL financing will be reflected in the AWPBs approved by the provincial project management. The achievement of the DLI_1, DLI_2 and DLI_3 defined in the technical note will be consolidated semi-annually by DARA based on reports prepared by the Counties. DARA will submit the data for the verification of a third-party Verification Agency (VA). The verification review will be done in line with the Program Guidelines approved by DARA for two counties chosen randomly and 20% sample of the trainees that succeeded the "New Professional Farmer Development Training Program". This process will be repeated semi-annually during the five years of implementation.

2.3 Accounting and financial reporting

China has been a member of the International Public Sector Accounting Standards Board (IPSASB) since 2007. The government accounting in China was originally designed for budget monitoring and management under cash basis of accounting. China performed a series of reforms for the adoption of international standards. According with the 2019 Global Status Report of the International Federation of Accountants, China has partially adopted International Standards on Auditing (ISA) and has not yet adopted the International Public Sector Accounting Standards (IPSAS).

China follows an integrated countrywide budget system, resulting from both top-down and bottom-up interactions. Local governments have significant budgetary discretion within the overall envelope established at the center. Local governments use line-item budgets, which present revenue and expenditure details on a cash-accounting basis. However, they do not fully account for capital finances and capital expenditures and provide no information on service delivery.

The last major reform of China's fiscal system occurred in 2014, with the adoption of a new budget law. The main goals of the law are to improve the budgeting process and the transparency and accountability of local government financing. To achieve this, it requires the adoption of a multiyear budget and specifies the conditions for managing annual deficits and surpluses in a medium-term perspective. In principle, moving beyond annual budgeting will improve planning and allow the government to better manage fiscal policy across economic cycles (IMF 2018).

The 2014 budget law also seeks to improve coverage and reporting of the budget by consolidating all existing government budgets into the general government budget and by requiring publication of budgets and outturns within 20 days after approval by the People's Congress. Finally, the law requires conditional transfers to gradually be replaced by general transfers to support basic public service delivery and reduce regional disparities. However, it does not address the fundamental misalignment of expenditure responsibilities and taxing powers and the large vertical imbalance that has prevailed since 1994 (Lam, Wei, and van Eden 2017).

China is the most decentralized country in the world in terms of subnational spending shares (Jiwei 2008). Local governments account for 85 percent of general government budgetary spending. Taking into account off-budget expenditures financed through local government financing vehicles raises this ratio to 89 percent of total government spending. While the central government retains some control over subnational spending, notably through the use of binding expenditure laws and mandates (Bahl and Martinez Vazquez 2006, Ahmad 2011), this ratio is higher than even the most decentralized federations, even though China is constitutionally a unitary state.

2.4 Internal controls

China has an extensive off-the budget expenditures financed by fees and charges from the subnational governments. The ratio of extra-budgetary to budgetary expenditures was estimated at one fourth in 2002 (Martinez and Alii, 2014). Most of the time, the administration of these resources lack transparency.

Most transactions are processed using the government's processes and systems. Segregation of duties, quality control, reconciliation and audit arrangements are in place. All payments are subject

to official verification and payment routines. Government payments are made by the Department of Finance (DoF) at each level of implementation.

The “New Professional Farmers Development Training Program” is managed by the Hunan Provincial Department of Agriculture and in accordance with the respective established guidelines.

The Department of Agriculture and Rural Affairs (DARA) is responsible of issuing the guidance for procedures of implementation of the Program. This process is yet to be confirmed. DARA also is in charge of the supervision and reconciliation of detailed Technical and Financial data from each country. The Verification Agency (VA) will be contracted by DARA.

Each county will be in charge of raising awareness for the implemented of the Program and to address technical and financial issues in their respective counties. Counties will develop strategies to ensure smoothness in the implementation. The Counties will report the results and facilitate the VA verification.

The Verification Agency will follow the Program Guidelines issued by DARA. The verification will require the review relevant training documents and information on a sample basis. The VA will collect relevant technical data of the Program, but for Disbursement purposes, only the following will be considered:

- a) Completion of the Training Program
- b) Age
- c) Gender

The rest of the information collected from beneficiary surveys will be used for the purposes of tracking the implementation progress of the program.

2.5 Internal audit

The internal audit function in the Hunan province is usually carried out by contractors. According to the Audit Law of the People’s Republic of China, the Hunan Provincial Audit Office is responsible for guiding, supervising and monitoring the performance of all internal audit institutions within the province.

China follows an integrated, countrywide budget system, resulting from both top-down and bottom-up interactions. Local governments have significant budgetary discretion within the overall envelope established at the center. The internal audit function is in place, but effectiveness, consistency and recurrency vary across local governments.

2.6 Governance and Anticorruption

Transparency International reports that China's global Corruption Perception Index (CPI) ranking for 2019 has improved by seven places while its CPI score improved by two points (Rank 80/180; Score 41/100). In China, an active anti-corruption enforcement across the public sector has been consistently implemented.

The Chinese government has developed the system “Safe China” in which continued efforts have been made to address all kinds of crimes, fight against corruption, advance rule of law and cooperate with

other countries to combat transnational crimes and terrorism, thus safeguarding national and public security. A strong momentum has been built in the anti-corruption campaign.

China has established a public legal service system covering both urban and rural areas and the provision of legal aid has been enhanced. Efforts have been made to deepen judicial reforms, improve the legal aid system and strengthen the judicial relief system. Law-based governance has been promoted in cities, counties, grassroots organizations, departments and industries.

China has stepped up cross-border judicial and law enforcement cooperation and transnational crimes have been effectively cracked down upon. By the end of 2016, China had signed 14 treaties on the transfer of convicted criminals, 11 of which had come into force, and 93 convicted foreigners has been handed over to more than 20 countries.

China has maintained high pressure on corruption and a strong momentum has been built in the campaign against corruption. China has persistently aligned the self-discipline of the Party with the rule of law and promoted full coverage of intra-Party supervision and state inspection. China has fought corruption with zero tolerance to leave no act of corruption and graft unpunished. In 2016, the Accountability Regulations of the Communist Party of China and the Intra-Party Supervision Regulations of the Communist Party of China were issued, strengthening regulations and discipline of the Party and clearly assigning the leading and supervisory responsibilities to Party and government officials at various levels. Resident discipline inspection units have been sent to all central-level Party and government organs to give full play to their supervisory role. Inspection tours have become a major means of intra-party supervision. In 2016, the Central Leading Group for Inspection Work carried out three rounds of inspection in 91 Party organizations at government agencies, completing the inspection work on all central Party and government departments (China's Progress Report, 2017).

The government has established agencies at every government level (counties, townships, procurement companies, public resources transaction centers) for combating fraud and corruption. These agencies are empowered to prevent, report, detect, investigate and prosecute to sanction. These agencies depend from the Discipline Inspection Commissions and the Ministry of Supervision. Also, more controls are exercised by the anti-corruption bureaus in the Procuratorates of the central, provincial, prefectural and county levels.

2.7 Audit

The National Audit Office (NAO) was established in the Constitution of 1982. The NAO is a department under the State Council. The Audit Bureau is authorized to audit the public finances of the departments of the State Council, Local Governments, State-Owned Banks and Companies. The NAO reported directly to the National People's Congress for the first time in 1996. The NAO is currently aligning its procedures to comply with the International Standards on Audit.

According with the Organic Act of the National Audit Office, an audit department shall be established in every province and provincial-level city, and an Audit Office in every county and county-level city to audit the local governments and their subordinate organizations. The auditing departments or offices must also audit central or local government organizations in their area as authorized by the NAO.

The NAO has published annual audit reports on the implementation of the Central Budget since 2001. The NAO strengthens relevant rules, issues standards and provides training to improve the

professional quality of auditors. Recent audits are more focused on emerging risk areas (real estate market, stock exchange or employment practices in State-Owned Banks and Companies). The NAO was commissioned to audit local governments in mid-2013. Following the issuance of the NAO report in December 2013, the central government has increased its support, offering more policy options intended to diversify public funding sources for local governments.

The NAO is present at local levels (Province and County). The local audit bodies are responsible to their higher-level auditing bodies. Although the Local Governments are responsible to the Local People's Congress, there is limited scope for the auditors at local levels to establish correction measures. Issues in the implementation of local budgets must be reported by the Auditor General to the Prime Minister before referring the issues through the Local People's Congress.

Around two million functionaries work in administrative agencies and public service institutions of China, many more in State-Owned Banks and Companies. Lack of training for government staff is recognized as a major issue in the accounting and audit reform and its implementation.

According to the Audit Law of the People's Republic of China, the Hunan Provincial Audit Office has the following responsibilities:

- Exercise audit supervision over financial revenues and expenditures of the Provincial People's Government and its departments, state-owned financial institutions, enterprises and public institutions according to the Constitution and the Audit Law of the People's Republic of China, and other revenues and expenditures to be audited in accordance with provisions prescribed in the Audit Law;
- Audit financial responsibilities of the senior officials in the Party and government administration during their tenures of office;
- Administer the performance of audit institutions at all levels in Hunan;
- Supervise the quality of audit by non-governmental audit bodies; and
- Organize audit trainings.

The Hunan Provincial Audit Office (HPAO) will audit the investment project. It is proposed to extend its scope of this audit to also assess the RBL sub-component.

2.8 Procurement

An assessment of the borrower country's procurement systems (procurement risk matrix - PRM) was undertaken as part of the design. The PRM primarily identifies the following based on the assessment carried out on pillar A and partially for pillar B (based on pre-existing capacities and institutional structures). Based on-going project procurement assessments, the overall Inherent Procurement Risk score should range between 2.5 to 2.6 which relative identifies low inherent risk) with fairly minimal measures to ensure adequate capacity developed and maintained. In consideration also that mitigation measures which will also include IFAD safeguard measures such as IFAD Fraud and Anticorruption Policy, Right to Audit and other policies as referenced by IFAD Procurement Guidelines. The residual procurement risk is envisaged to be low.

In terms of applicable procurement rules and procedures, in this project the IFAD system such as No Objection Tracking Utility System (NOTUS) will be used to prepare, clear and update Procurement Plans and conduct all procurement transactions including other non-procurement transactions. Accordingly, all the procurement contract under the proposed project will be entered into, tracked,

and monitored online through IFAD Client Portal – Contract Monitoring System. The relative size of infrastructure, goods and services are small and it is envisaged that the local market will be interested and capable to execute the contracts included in the project. The procurement activities under the project include rural infrastructure etc., among which are small works, goods as well as consultancy service procured by approaching the national market, following national competitive procurement procedures, and using the harmonized model bidding documents of IFI agreed by IFAD. For the consulting services, Qualifications Based Selection (CQS), SSS (when state owned research organisation or entities are used) and Individual Consultants Selection (ICS) will be mainly used for selection of the local consultants, which will be carried out by approaching national markets considering that the participation of domestic firms is most likely to achieve the best fit for-purpose and value-for-money.

H2RDP will pilot the Programmatic Results-Based Lending (RBL) on the Sub-component A.3 Promoting Gender-Sensitive Professional Farmer Training. The selected Program will be the “New Professional Farmer Training” implemented at the County level and funded through the Consolidated Poverty Reduction Funds (CPRF). The disbursement under RBL will be conditional to the achievement of agreed and independently verifiable indicators and not depend on evidence of expenditures or transactions. It is envisaged there will be relative minimal small value procurement under the Programmatic Results-Based Lending (RBL) on the Sub-component A.3 Promoting Gender-Sensitive Professional Farmer Training which will be mainly be training cost of participants and other administrative activities which would be subject to their party validation and overall audit. Since implementation model is relative force account in nature, i.e. the use of the preexisting structure, and resources, we envisage very minimal procurement to be undertaken which would consist of additional trainers and other administrative cost for funding participants travel, training cost, accommodation and subsistence allowance in preexisting country level training facilities.

In terms of procurement planning, an 18 month consolidated procurement plan has been prepared for the project which will be revised once the PPMO and CPMO team are in place. Business Plan Proposals in funding contract activities to be procured for the first year’s proposals submitted by the enterprises/cooperatives under Component A1 and A2 would be detailed and established in the Projects Implementation Manual. The oversight arrangement for the Business Plans would be covered in PIM. The Procurement Plans will be updated at periodically to (a) reflect project implementation; (b) accommodate changes to be made; and (c) add new packages as needed for the project. All the contract activities included in the consolidated procurement plans will be procured by following the procedures and processes consistent with IFAD Procurement Guidelines.

In the Procurement Plans for all other component other than A3, the contract activities will be procured and executed by the PMO or CPMOs depending on provincial or county level activities. The contract activities being financed by the matching grants in the proposals submitted by the enterprises/cooperatives under Component A1 and A2 will be procured and executed by the enterprises/cooperatives with oversight of the respective CPMO. For as the low value procurement activities, and no procurable items of training, study tours, workshops, extension of sustainable production practices etc. financed by the matching grants, the PMO will have an implementation agreement signed between the CPMOs and each enterprise/cooperative including at least scope, technical, the IFAD safeguards, fiduciary and anti-corruption requirements and verification procedures etc. Under the implementation agreement low value procurement activities, such as small goods, may be directly procured by the enterprise/cooperative by following the commercial procurement practice as specified in the Procurement Manual with due attention to economy and efficiency under the implementation agreements and will be subject to validation by supervision mission and audits.

Under the implementation agreement the non-procurable items of training, study tours, workshops, extension of sustainable production practices etc. financed by the matching grants will be directly carried out by the enterprise/cooperative. Disbursements to the enterprise/cooperative will be made to the enterprise/cooperative against the verification conducted by CPMO and the supporting documents for relevant eligible expenditures provided by the enterprise/cooperative.

In terms of capacity of project management in procurement, both the PMO and the CPMOs have been officially established and a procurement staff has been respectively designated for the PMO and each CPMO. A procurement agent with the IFI or Bank procurement experience will be hired by the PMO, which will assist the PMO and CPMOs in conducting procurement of the contract activities in the Procurement Plans, including preparing commercial part of the bidding documents, publishing procurement notices and contract awards, issuing bidding documents, clarifications or amendments of the bidding documents, conducting bid opening, organizing bid evaluation etc.. With the implementation of proposed actions to strengthen the procurement capacity (refer to below mitigating measures), the assessment concluded that PMO and CPMOs have adequate capacity to carry out procurement activities for the proposed Project

3. Risk Assessment and mitigation measures proposed

Risk identified:

Local budgeting and financial management are not yet comprehensive in China. Local budgets are incremental, segmented, and do not provide a good overview of government operations. External and internal controls are not yet well developed, and the local people's congresses do not have the means to exercise an effective oversight.

Mitigation measure:

The counties should be able to prepare comprehensive budgets that clearly differentiates the budget by Program. This also should be reflected at the consolidation stage within DARA and during implementation for an effective oversight and monitoring.

Risk identified:

The reporting of the Poverty Alleviation Consolidated Fund (CF) at county level are not designed to provide specific program reporting. Counties have been reporting in different formats and providing different information generating inconsistencies among counties in the classification of financial information and difficulties in the consolidation of information.

Mitigation measure:

It is recommended that DARA prepares a set of instructions to accompany the template to report on the Poverty Alleviation Consolidated Fund (CF). DARA should also monitor the preparation of reports to ensure consistency among the counties and to facilitate consolidation on a monthly basis.

Risk identified:

External audits are carried out at the provincial level and at the county level on an annual basis. The audits are carried out by the Provincial Audit Office and the County Audit Office, dependant from the National Audit Office. These audits will include the Program RBL of IFAD as part of all the other funding sources of the Province and Counties, but will not pull out the IFAD financing separately.

Mitigation measure:

The Hunan Provincial Audit Office (HPAO) will audit the investment project. It is proposed to extend its scope of this audit to also assess the RBL sub-component.

The Audit of the investment part will follow normal IFAD procedures and standards. The HPAO will also perform the audit of the Programme "New Professional Farmers Training" subject to the RBL following the IFAD Handbook for Financial Reporting and Auditing but without the traceability of IFAD funds.

The RBL Programme might reflect national standards in terms of reporting and auditing. In case of ineligibility of expenditures under the RBL Component, unless it is directly attributed to a different funding source other than IFAD, the IFAD funds will be subject to ineligibility based on a percentage basis.

The audit will provide one management letter with two sections, one for the investment project and another one for the RBL Programme. The audit report will reflect two audit opinions, one for the investment project and another one for the RBL Programme without the need to identify the IFAD Financing.

The audit and accounting standards for the investment project will follow the IPSAS under accrual basis, as mentioned in the Design report of H2RDP. The audit will be shared to IFAD in English within six months from the end of the fiscal year.

Risk identified in Procurement:

The potential risks related to procurement and contract management have been identified during project preparation. The risks include:

- (i) The PMO and the county agricultural and rural bureaus (the County PMOs or CPMOs) do not have experience in implementing the IFAD financed projects but have experience in implementing World Bank Funded Projects;
- (ii) The procurement staff assigned in the PMO and the CPMOs do not have the IFAD procurement experience;
- (iii) The PMO established within Hunan DARA and the CPMOs within BARA may have weak technical capacity in reviewing or preparing works, goods and consultancy services bidding documents, Terms of References (TORs) as well as deliverables or outputs. They may also be weak in executing works contracts as employers, reviewing variations and pricing, and acceptance of the works etc.

Mitigation measures:

To mitigate potential risks, the proposed measures include:

- (i) Designers and residential supervision engineering firms will be hired to prepare technical part of bidding documents, including technical specifications, drawings and bill of quantities, and

to supervise the works contracts on the sites during contract implementation under Component 2;

- (ii) Technical experts will be hired or engaged to assist the PMOs to review the bidding documents, bid evaluation reports, draft contracts and variations and pricing from a technical perspective;
- (iii) IFAD will support the project with continuous minimal procurement training and the PMO and CPMOs' staff are also encouraged to attend the procurement training organized by an Institute acceptable to the Bank throughout the project preparation and implementation; and
- (iv) Since the proposed Project covers a number of counties with a variety of contracts and activities, a Procurement Manual should be prepared, including detailed procurement arrangements and procedures for each procurement approach, so that the county PMOs may easily follow the IFAD's procedures and requirements during project implementation.

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
1. Implementing Agency (IA)						
1.1 Is the IA part of the government structure? Please explain the legal status of the entity.	Yes				L	The project will be implemented by Foreign Financing Project Management Center (a legally registered as a public institution) who has been assigned by the Hunan Provincial Department of Agriculture and Rural Affairs (DARA) for project supervision and coordination. DARA is part of the provincial government body.
1.2 Has the IA received IFAD, WB, United Nations, ADB, etc. resources in the past? If so, provide details of amounts, from which agency and for what purpose.	Yes					DARA has experience implementing WB, ADB and IFAD projects.
1.3 Does the IA have statutory/government reporting requirements? Please describe.	Yes					Yes. They report to the Hunan Provincial government.
1.4 Is the governing body for the IA independent from management? If so, please describe.		No				

<p>1.5 Does the IA have any pending legal actions against it? Provide details and actions taken by the IA to resolve the legal actions, if any.</p>		No				<p>The IA does not have any pending legal actions.</p>
2. Funds Flow						
<p>2.1 Can the IA easily receive and transfer funds? If so, please describe the process.</p>	Yes				<p>M</p> <p>The reporting of the Poverty Alleviation Consolidated Fund (CF) at county level is not designed to provide specific program reporting. Counties have been reporting in different formats and providing different information generating inconsistencies among counties in the classification of financial information and difficulties in the consolidation of information.</p>	
<p>2.2 Have there been major problems in the past in receipt of funds by the IA, particularly where the funds flow from government entities? If so, please describe.</p>		No				
<p>2.3 In the past, has the IA had any problems in the management of funds received? If so, please describe.</p>		No				
<p>2.4 Does the IA have capacity to manage foreign exchange risks? If so, please describe the process.</p>						

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
2.5 If some activities will be implemented by others, such as civil society groups or non-governmental organizations, does the IA have the necessary reporting and monitoring mechanisms to track the use of funds? Does the IA have experience with implementation of activities by external civil society or non-governmental organizations? If so, please describe.	Yes					
3. Organizational Structure and Staffing						
3.1 Is the organizational structure of the IA's accounting/finance department appropriate for the level of financial volume? Does the organizational structure provide clear lines of reporting and accountability? If so, please describe. <i>Attach an organization chart if available.</i>	Yes				L	The organizational structure of the IA's accounting/finance department is appropriate.
3.2 Are the level of posts and competency of staff appropriate for the level of financial volume in the accounting/finance	Yes					The level of posts and competency of staff are adequate.

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks	
<p>department? Identify the staff, including job titles, responsibilities, educational backgrounds and professional experience.</p> <p><i>Attach job descriptions and CVs of key accounting/finance staff.</i></p>					L		
3.3 Is the IA's accounting/finance function staffed adequately to ensure sufficient controls are in place to manage funds? If so, please describe.	Yes						
3.4 Are accounting/finance staff familiar with IFAD, WB, United Nations, ADB, etc. procedures? If so, please provide details.	Yes						
3.5 Are there vacancies in positions considered key? If so, provide the estimated date of appointment.		No					
3.6 Are staff frequently transferred to other departments, offices, etc.? If so, what is the estimated frequency?		No					Current project team is quite stable at provincial level. However, staff turn over sometimes high at some counties.
3.7 Does the IA have training policies for accounting/finance staff? Are necessary trainings undertaken? If so, please describe.	Yes						

3.8 Has there been significant turnover in the past five years? If so, has the rate improved or worsened? Does it appear to						
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Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
be a problem? If so, what is the IA doing to address this issue?"						
3.9 Does the IA perform background verification/checks on all new accounting/finance and management positions? If alternative practices for processing new hires are in place, please provide a brief description.	Yes					They have strict recruiting procedure to follow and all posts and selected candidates must be announced on public webpage for transparency purpose.
3.10 Does the IA have a defined and documented internal control framework? Is this framework consistent with international standards? If so, please describe.	Yes					Sufficient segregation of duties for authorization, execution, recording of transactions and custody of assets is in place.
4. Accounting Policies and Procedures						
4a. General						
4.1 Does the IA have an accounting system that allows for proper recording of financial transactions including allocation of expenditures by sources of funds?	Yes				L	The IA has an accounting system that allows for proper recording of financial transactions

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
					L	
4.2 Are controls in place concerning preparation and approval of transactions, ensuring that all transactions are correctly made and adequately explained?	Yes					Controls are in place concerning preparation and approval of transactions
4.3 Is the chart of accounts adequate to properly account for and report on activities and budget execution?	Yes					
4.4 Are the general ledger and subsidiary ledgers reconciled at least monthly? Are explanations provided for significant reconciling items?	Yes					

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
4.5 Are all accounting and supporting documents retained permanently in a defined system that allows authorized users easy access? If so, please describe.	Yes					Accounting and supporting documents are retained according to government requirements.
4b. Segregation of duties						
4.6 Are the following functional responsibilities performed by different units or individuals: (a) authorization to execute a transaction; (b) recording of the transaction; and (c) custody of assets involved in the transaction?	Yes				L	
4.7 Are the functions of ordering, receiving, accounting for and paying for goods and services appropriately segregated?	Yes					
4.8 Are bank reconciliations prepared by individuals other than those who make or approve payments?	Yes					
4c. Budgeting system						

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
4.09 Do the IA's budgets lay down physical and financial targets?	Yes				M	Local budgeting and financial management are not yet comprehensive in China. Local budgets are incremental, segmented, and do not provide a good overview of government operations. External and internal controls are not yet well developed, and the local people's congresses do not have the means to exercise an effective oversight.
4.10 Are IA budgets prepared for all significant activities in sufficient detail to provide a meaningful tool for monitoring subsequent performance?	Yes					
4.11 Are actual expenditures compared to the budget with reasonable frequency? Are explanations required for significant variations from the budget?	Yes					
4.12 Are approvals required prior to significant variations from the budget?	Yes					
4.13 Does the IA have a designated individual(s) responsible for preparation and approval of budgets related to agency funding?	Yes					
4.14 Are procedures in place to plan activities, collect information from the units in charge of the different components and prepare the budgets? If so, please describe.	Yes					

4.15 Are the plans and budgets of activities realistic, based on valid assumptions and developed by knowledgeable individuals?	Yes					
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Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
4d. Payments						
4.16 Do invoice processing procedures provide for: <ul style="list-style-type: none"> • Copies of purchase orders and receiving reports to be obtained directly from issuing departments? • Comparison of invoice quantities, prices and terms with those indicated on the purchase order and with records of goods actually received? • Checking the accuracy of calculations, if any? 	Yes				L	Counties collect invoices and supporting documents from different implementing agencies and suppliers. All the information is sent to BOFs for review and payment.
4.17 Can the IA identify tax-exempt activities to ensure tax is not paid?		No				In China, VAT tax has to be paid together with activity but then eligible entity can claim for tax refund.
4.18 Are all invoices stamped 'PAID' or is there an existing practice (other than stamping) that prevents double claiming of invoices? Are all invoices dated, reviewed and approved, and clearly marked for account code assignment?	Yes					

4.19 Do controls exist for preparation and approval of payroll expenditures? Are changes properly authorized? If so, please describe.	Yes					The payroll is prepared by another government institution.
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Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
4.20 Do controls exist for expense categories that do not originate from invoice payments, such as Daily Subsistence Allowance (DSA), travel, consultancies?	Yes					Government policies and procedures are followed.
4e. Policies and procedures						
4.21 Does the IA have a single stated basis of accounting (e.g., cash or accrual)? If so, please describe.	Yes				L	Accrual basis.
4.22 Does the IA have an established accounting manual sufficient to ensure control of assets and proper use of agency funds? Are internationally accepted accounting standards followed? If so, which standard?	Yes					Yes, provincial government has accounting management regulation in place.
4.23 Does the IA have an adequate policies and procedures manual to guide activities and ensure staff accountability? If so, please describe.	Yes					MOF and NDRC have issued management regulations for foreign financing projects in 2017. DARA follows it accordingly.
4.24 Do procedures exist to ensure that only authorized persons can alter or establish a new accounting principle, policy or procedure to be used by the IA?	Yes					Duties are segregated in at DARA.

4.25 Are there written policies and procedures covering all routine financial management and related administrative activities? Are these accessible? Please describe.	Yes					
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Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
4.26 Do policies and procedures clearly define 'conflict of interest' and 'related party transactions' (real and apparent) and provide safeguards to protect the organization from them? If so, please describe.	Yes					
4.27 Are manuals distributed to appropriate personnel? If so, please describe the manuals and the personnel who receive them.	Yes					
4f. Cash and banks						
4.28 Are there authorized signatories on the bank accounts? How many signatories are on the bank account usually and how many are required to execute transactions? If so, provide names.	Yes				L	Usually two signatories. One from DARA finance department and one from project team.
4.29 Does the IA maintain an adequate, up-to-date cashbook, recording receipts and payments?	Yes					No cashbook as treasury of DOF serves as the payment transaction center for all qualified payments. PPMO does not handle payments.
4.30 Do controls exist for the collection, timely deposit and recording of receipts at each collection location? If so, please describe.	Yes					DOF and BOFs separately manages payments. DARA and counties collect supporting documents including invoices, contracts, receipt of

						goods/services, etc.
4.31 Are bank balances and cash ledger reconciled monthly and properly approved? Are explanations provided for significant and unusual reconciling items?	Yes					

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
4.32 Are cash and checks maintained in a secure location? Has access been properly designated and maintained?	Yes					Limited payments are made in cash. All transactions are done through bank transfers.
4g. Safeguards for assets						
4.33 Is there a system of adequate safeguards to protect assets from fraud, waste and abuse? If so, tour the facility to ensure the system has been implemented and followed.	Yes				L	Inventory of assets is done annually.
4.34 Are subsidiary records of fixed assets and inventory kept up to date and reconciled with control accounts? If so, please describe.	Yes					
4.35 Are there periodic physical inventories of fixed assets and stocks? If so, please describe.	Yes					
4.36 Are fixed assets and inventory adequately covered by insurance policies?		No				No insurance covers assets.
4h. Other offices or entities²						
4.37 Do any other offices/entities participate in implementation? If so, does the IA have policies and	Yes				L	The Provincial Department of Human Resources and Social Security, the Provincial Poverty Alleviation Office, the Provincial

						Department of Agriculture and Rural Affairs, and the Provincial Women's Federation
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Subject area	Yes	No	N/A	Low risk consideration	Current Risk Low/Moderate Substantial or High	Remarks
process to ensure appropriate oversight and monitoring of implementation?					L	
4.38 Does information flow among the different offices/entities in an accurate and timely fashion? If so, please describe.	Yes					All official information is circulated in timely fashion and is filed at each government level to ensure proper communication.
4.39 Does the IA have a process in place to evaluate the impact of any deficiencies or negative findings identified through reporting or discussions with the other offices/entities? If so, describe the process.	Yes					
4.40 Does the IA maintain contractual agreements with other offices/entities?						

4.41 Does the IA have a process to ensure expenditures of other offices/entities are in compliance with the work plan and/or contractual agreement noted in item 4.40?	Yes					
4i. Other						
4.42 Has the IA advised employees, beneficiaries and other recipients to whom they should report if they suspect fraud, waste or misuse of agency resources or property?	Yes				L	In DARA, there is a division on discipline inspection. Its function is to channel and reporting on fraud, waste or misuse of government resources.

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
4.46 If yes to item 4.42, does the IA have a policy against retaliation for those who report fraud, waste or misuse of agency resources or property?		No			L	Their current policy does not have specified article on retaliation.
5. Internal Audit						
5.1 Is the internal auditor sufficiently independent to make critical assessments? To whom does the internal auditor report?			N/A		M	The internal audit function in the Hunan province is usually carried out by contractors.
5.2 Does the IA have stated qualifications and experience requirements for internal audit department staff? If so, please describe.			N/A			The internal audit function is in place, but effectiveness, consistency and recurrency vary across local governments.

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
5.3 Does the internal auditor have policies and procedures to take action on findings identified?			N/A		M	
5.4 Does the IA have strong internal controls to ensure funds are expended for their intended purpose, to discourage and prevent improper use of funds, and to safeguard assets? If so, please describe.	Yes					
6. External Audit						

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
6.1 Are the IA's specific financial statements audited annually by an independent auditor? If so, please describe the auditor.	Yes				H	Annual audit are conducted by provincial Audit Office and by the Audit Offices at the county level.
6.2 Are there any delays in audit of the IA? When are the audit reports issued?		No				
6.3 Is the audit of the IA's financial statements conducted according to the International Standards on Auditing?	Yes					The NAO is currently aligning its procedures to comply with the International Standards on Audit.
6.4 Were there any major accountability issues brought out in audit reports of the IA over the past three years?		No				
6.5 Have any recommendations made by auditors in the prior three audit reports and/or management letters not yet been implemented?		No				The NAO requires corrective actions to be completed within 12 months time.
6.6 Historically, has the IA prepared audit plans?						The NAO prepares an audit plan together with MOF.

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
7. Reporting and Monitoring						
7.1 Are financial statements prepared specifically for the IA?	Yes				M	
7.2 What is the frequency of preparation of the financial statements mentioned in 7.1? Are the reports prepared in a timely fashion so they are useful to management for decision-making?	Yes					FS are prepared annually
7.3 Does the reporting system have the capacity to link the financial information with the work plan's physical progress? If separate systems are used to gather and compile physical data, what controls are in place to reduce the risk that the physical data may not synchronize with the financial data?						Local budgeting and financial management are not comprehensive. Local budgets are incremental, segmented, and do not provide a good overview of government operations.

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
7.4 Does the IA have established financial management reporting responsibilities that specify what reports are to be prepared, what they are to contain and how they are to be used? If so, please describe.	Yes				M	
7.5 Does the IA have financial reports that compare actual expenditures with budgeted and programmed allocations?	Yes					
7.6 Are financial reports prepared directly by the automated accounting system or are they prepared using spreadsheets or some other means?						
7.7 Do the IA's total revenues/contributions exceed its total expenditures over the past three fiscal years? <i>Provide the amount of total revenues/contributions and total expenditures for the current and prior fiscal year.</i>			N/A			

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
8. Information Systems						
8.1 Is the financial management system computerized? If so, does the IA have policies and procedures to maintain this system?					M	The Department of Finance at the provincial level manages the finances of DARA. The Bureaus of Finance (BOFs) at the county level manages the finances of the Counties. The IA has failed to explain if there is an information system used by the government at Provincial and County levels.
8.2 Does the IA have policies and procedures to restrict access to the computerized financial management system to appropriate personnel? If so, please describe them.						
8.3 Can the computerized financial management system produce the necessary financial reports?						

Subject area	Yes	No	N/A		Current Risk Low/Moderate Substantial or High	Remarks
8.4 Are IA staff adequately trained to maintain the computerized financial management system?					M	
8.5 Does the IA have appropriate safeguards to ensure the confidentiality, integrity and availability of the data? If so, please describe them.						

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