

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 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 | 16-07-2024

Abbreviations and Acronyms

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ADECOS	Community Development and Sanitation Agents
ADPP	Angolan non-governmental association (Ajuda De Desenvolvimento De Povo Para Povo)
AFAP	Artisanal Fisheries and Aquaculture Project
AFS	Aquaculture Field School
AWPB	Annual Work Plan and Budget
BSF	Black Soldier Flies
CAS	Catch Assessment Surveys
CCP	Community Council of Fisheries
CPT	Carbonized Pond Technology
ECP	Anti-poverty Strategy
EIA/ESIA	Environmental Impact Assessment/ Environmental and Social Impact Assessment
GoA	Government of Angola
IFAD	International Fund for Agricultural Development
IAA	Integrated Aquaculture-Agriculture
IPA	Institute for the Development of Artisanal Fisheries and Aquaculture
KM	Knowledge Management
LMP	Lagoon Management Plan
M&E	Monitoring and Evaluation
MINAMB	Ministry of the Environment
MINFIN	Ministry of Finance
MINPERMAR	Ministry of Fisheries and Marine Resources
MTR	Mid Term Review
NRM	Natural Resource Management
ORMS	Operational Results Management System
PDR	Project Design Report
PHLs	Post-Harvest Losses
PIM	Project Implementation Manual
PMT	Programme Management Team
PMU	Project Management Unit
PONAN	National Strategic Policies for Nutrition and Food Security
PPP	Public-Private Partnership
PPPP (4Ps)	Producer-Public-Private-Partnerships
PSC	Project Steering Committee
SA	Stock Assessments
SECAP	Social Environmental and Climate Assessment Procedures of IFAD
USD	United States Dollar
VIPL	Ventilation Improved Pit Latrine
WASH	Water, Sanitation and Hygiene

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

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

Executive Summary

Political and Economic Background – Angola’s economy is classified as a lower middle-income economy with an estimated 2023 nominal Gross Domestic Product (GDP) of US\$135.6 billion[1]. The country’s GDP is largely dependent on the petroleum industry; it accounts for over 50% of the GDP and about 90% of export earnings[2]. The country’s economy has undergone a modest recovery since the height of the COVID-19 pandemic. Real GDP growth reached 3% in 2022, up from 1.1% in 2021, mostly due to the sustained high oil prices averaging US\$100.65 per barrel in 2022 because of Russia’s invasion of Ukraine[3]. The high dependence on the oil sector implies that changes in the sector have a direct and immediate impact on the country’s economy.

Poverty and Food Security – The country faces significant challenges in terms of the development of basic social services and the persistence of social inequalities, including gender inequalities. The persistence of poverty and inequality contributes to the country’s poor ranking on the Human Development Index (148th out of 191 countries and territories). Rural populations, especially young people and women, are most affected.

Angola’s vulnerability to food insecurity strongly links to the recurring droughts, and related/associated disasters (including crop failure, water shortages, livestock diseases, land degradation, low income/limited household assets, etc.). Severe food insecurity continues to affect the livelihoods of many families due to cyclical droughts in the southwest of the country. Angola was ranked 97 out of 116 in the 2021 Global Hunger Index. Although the number of undernourished people has decreased, **food insecurity and undernutrition remain serious public health problems.**

Inland Fisheries – The Angolan inland fisheries and small-scale aquaculture sectors present a substantial and mostly underexploited prospects for fostering local economic development. This includes addressing poverty, alleviating food insecurity, and generating employment opportunities for the local people, including youth and women. It is, therefore, a source of primary driver for rural development. However, the sector is riddled with numerous challenges which constrain its exploitation for the benefit of the people. These include: a) limited literacy and awareness of nutrition and climate change-related issues among the fishing communities; b) weak or lack of sustainable lagoon management systems; c) limited community access to inland fisheries for both nutrition and income generation; d) lack of technical skills in aquaculture production among the target communities; e) limited access to technology, inputs, advisory services and support; f) scarcity of technical information regarding aquaculture suitability in the target areas; g) weak or lack of input and output market linkages; h) scarcity of aquaculture-linked enterprises and limited access to finance; i) poor infrastructure; j) market asymmetries; k) seasonal concerns; l) general system inefficiency; and m) lack of widespread business vision among all involved actors[4].

Project Rationale – The Artisanal Fisheries and Aquaculture Project (AFAP)[5], implemented during the period 2015-2023, successfully demonstrated that small-scale inland fisheries can significantly contribute to better rural livelihoods through increased incomes and improved food and nutrition security. It also established that several factors need to be addressed in order to make it a more competitive and sustainable conduit to improved rural livelihoods. Such factors include: a) inadequate inland extension service provision; b) lack of appropriate infrastructure and equipment; c) a need for more effective market access arrangements; d) limited access to quality aquaculture inputs (seed and feed); e) limited availability of a skilled workforce and technical knowledge on aquaculture value chain; f) lack of a supportive policy environment to help guide and protect the growth of the subsector; etc. However, AFAP also established that there are still some aspects of the subsector that need to be addressed in order to make it a more competitive and sustainable conduit to improved rural livelihoods. Some of such challenges include: a) inadequate inland extension service provision; b) lack of appropriate infrastructure and equipment; c) a need for more effective market access arrangements; d) limited access to quality aquaculture inputs (seed and feed); e) limited availability of a skilled workforce and technical knowledge on aquaculture value chain; f) lack of a supportive policy environment to help guide and protect the growth of the subsector; etc.

Based on AFAP’s experience, GoA has expressed the desire to make the inland fisheries subsector an avenue through which rural livelihoods, food and nutrition security can be sustainably improved as part of an integrated nutrition approach comprising other food systems. Accordingly, GoA has requested IFAD to liaise with its development partners and support an intervention to: a) scale-up AFAP’s tested and proven technologies to other parts of the country to not only help improve income/reduce poverty, food and nutrition security but also reduce fish imports; and b) address the inland fisheries’ challenges, as identified by AFAP, in order to provide a firm foundation for the sustainable growth and expansion of the subsector.

Goal and Development Objective – AFAP-2’s goal is to ‘contribute to improved household income, food and nutrition security through sustainable and climate resilient fisheries and aquaculture’. The Project Development Objective (PDO) is to ‘contribute to the reduction of rural poverty and food insecurity of smallholders in the target provinces by developing their economic potential while improving natural resources management capacity and resilience to climate change’. The Project will be implemented over an eight-year period.

Project Area – AFAP-2 geographical targeting will include the following five provinces: Bengo, Bie, Cuanza Norte, Malanje, and Uige. The choice of these provinces, made in liaison with the Government, was based on a logic of scaling up the positive achievements of AFAP and combines several criteria, including: a) the geographic proximity to the AFAP provinces and relevance to the Project’s double focus on fisheries co-management and aquaculture potential; b) the necessity to converge IFAD’s interventions

where they will have a significant impact on poor and vulnerable populations, particularly those most affected by food and nutrition insecurity.

Target Group – AFAP-2 target group includes individual fish farmers (or aquaculture promoters), cooperatives or groups, small family farms, rural households, including those headed by women, active rural women and youth or with diversified potential for economic and professional integration in aquaculture linkages. The project will focus, particularly, on rural communities that are economically and socially vulnerable, such as: a) artisanal fishers who are food and nutrition insecure; b) people with disabilities; c) ex-combatants and other disadvantaged groups; d) people affected by climate change and/or people living with HIV/AIDS, etc.

Targeting Strategy – The project will implement a participatory, inclusive and flexible targeting strategy based on a multi-dimensional targeting approach: a) geographical targeting of production basins and socio-economic targeting; b) direct targeting; and c) self-targeting. All these approaches will be backed up by facilitation and empowerment measures to promote fisheries and aquaculture entrepreneurship and increase opportunities for the vulnerable to be included in economic activities likely to improve their well-being.

Project Outcomes – AFAP-2 interventions will focus on addressing the identified factors limiting the effective functioning and inclusivity of Angola's inland fisheries and the following are the expected outcomes: a) Outcome 1: Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes; b) Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurships and infrastructure providing services; and c) Outcome 3: Strengthened institutions and policies for a sustainable and inclusive inland fisheries sector.

Project Components – The project will comprise the following components:

Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems – This component will focus on expanding AFAP's successful interventions and lessons in climate-resilient and nutrition-sensitive fisheries and aquaculture production strategies. AFAP achieved significant strides in inland fisheries co-management and community-based aquaculture production models^[6]. However, there is a need to refine the approach, emphasizing a shift towards business-oriented production to ensure long-term sustainability. The component will respond to Outcome 1 - *Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes*;

Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development – This aims at supporting Component 1 with the necessary infrastructure, market linkages and entrepreneurial capacities to deliver quality fisheries and aquaculture inputs and products linking the source, producer, intermediaries and the consumer. It will contribute to the achievement of *Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurships and infrastructure providing services*. The component will play a key facilitative and intermediary role both on the inputs and output markets. It is built around strengthening of linkages and networks among value chain actors; and

Component 3: Institutional Strengthening, Policy Engagement Support and Project Management – The objective of the component is to enhance the institutional capacity of community-based/farmer organisations and public entities providing services to target beneficiaries in the Project areas. It also seeks to facilitate the pathways for the Project's effective implementation and inclusive functioning of the inland fisheries sector, from production/capture to consumption.

Implementation Arrangements – AFAP-2 implementation will largely follow the AFAP management arrangements with some modifications aimed at improving effectiveness and efficiency of implementation. The Project delivery systems will be integrated into the decentralised organisational structures that cascade from the national to communal levels. MINPERMAR will be the Project's lead agency and will delegate the implementation to the Institute for the Development of Artisanal Fisheries and Aquaculture (IPA); IPA will have the responsibility of overseeing the Project's implementation. It will recruit the key PMU staff for the day-to-day management of the Project. The PMU will recruit a core team of experienced staff to manage and oversee AFAP-2 implementation. It will also have access to Technical Assistance (TA) for some of the expertise that will be needed for effective Project implementation.

Project Costs and Financing – Total AFAP-2 costs are set at US\$ 90 million over the eight-year Project implementation period. The Project will be financed through contributions from the following financiers: a) IFAD12 Performance-Based Allocation System (PBAS), with a loan of US\$42.78 million; b) IFAD12 Borrowed Resources Allocation Mechanism (BRAM), with a loan of US\$15.0 million; c) the European Union (EU), with a loan of US\$10.0 million. Domestic co-financing will include: a) GoA will contribute both in-cash (with about US\$ 6.44 million through waived duties and taxes deposited to the government counterpart account at project level), and in-kind (with about US\$ 2.78 million through office space for the PMU at central and provincial level, and contribution to salaries of the extension workers); b) private sector (enterprises, and other private entities), with an expected contribution of about US\$ 8.04 million (in cash e.g., through the Producer-Public-Private-Partnerships (4P) agreements); and c) beneficiaries, who are expected to provide about US\$ 4.96 million (through in-kind contributions). All three project components partially contribute towards the IFAD climate finance, with a total allocation of US\$35.853 million (61% of IFAD financing)

Environment and Social Category and Climate risk Classification – The environmental and social risk categorization of AFAP-2 is *moderate*. The main environmental and social risks identified for the fisheries and aquaculture development activities include: a) contamination of water bodies as ponds are being drained or cage culture is introduced in lagoons; b) land degradation as a result of land use change and the removal of vegetation to construct ponds and markets and rehabilitate roads; c) increased waste volumes at fish landing points and markets; and d) conflicts over resource (e.g. water) use between fish farmers and nearby communities. and e) nutrition deficiencies, poor working conditions, child labour and community health and safety issues. These risks will be avoided or minimised through specific measures that have been included in the design. The climate risk classification of AFAP-2 is moderate. Climatic events, such as floods and droughts will have potential adverse impacts on productivity of AFAP-2 infrastructure if not well sited and constructed. Specific measures need to be articulated to increase climate change resilience of target beneficiaries and their livelihoods. To mitigate social risks, proposed interventions include enforcement of international labour standards, nutrition education and implementation of occupational health and safety measures

Implementation Readiness Plans – Projects in Angola tend to experience considerable delays to effective, on-the-ground activity implementation. To that effect, the design process has been proactive and sought to address some of the factors responsible for the start-up delays. The following has been done at the design stage to improve implementation readiness and reduce start-up delays: a) preparation of a draft Annual Work Plan and Budget (AWPB) and the associated Procurement Plan; b) preparation of a draft Project Implementation Manual (PIM); and c) preparation of all job descriptions/terms of reference for all the different Project Management Unit positions at different levels. In addition, to facilitate a prompt start-up, a withdrawal up to US\$ 500 000 may be made from the IFAD Loan to pay for expenditures related to the Project start-up before fulfilment of the conditions precedent to withdrawal. The start-up activities will include: Recruitment of key staff, finalizing the Project Implementation Manual including the Financial procedures, accounting and procurement manual, finalization of the first AWPB and procurement plan, organization of a Start-up workshop, procurement of an accounting software, Finalization of Investment/grant guidelines, baseline survey and mapping of beneficiaries and templates.

1. Context

A. National context and rationale for IFAD involvement

a. National Context

1. **Political, Economic and Social Context** – Angola's economy is classified as a lower middle-income economy with an estimated 2023 nominal Gross Domestic Product (GDP) of US\$135.6 billion[7]. The country's GDP is largely dependent on the petroleum industry; it accounts for over 50% of the GDP and about 90% of export earnings[8]. The country's economy has undergone a modest GDP recovery since the height of the COVID-19 pandemic. Real GDP growth reached 3% in 2022, up from 1.1% in 2021, mostly due to the sustained high oil prices averaging US\$100.65 per barrel in 2022 because of Russia's invasion of Ukraine[9]. High oil revenues further widened the fiscal surplus from 1.9% in 2021 to 3% of GDP in 2022. However, moderated oil exports took the current account surplus down to 8.9% of GDP in 2022 from 11.2% in 2021, while the debt-to-GDP ratio declined further, to 56.1% from 82.9% over the same period[10].
2. Global inflation pressure from Russia's invasion of Ukraine was eased by improved terms of trade. The increased export revenue and agricultural production reduced food inflation and overall inflation from 25.8% in 2021 to an estimated 21.3% in 2022[11]. The banking sector also improved, with more positive economic performance and lower private sector debt in 2022. Nevertheless, unemployment remains high, at 30%, and the country continues to face challenges in curbing the poverty rate (40.6% in 2019)[12]. The Angolan kwanza appreciated significantly in 2022 but faced depreciation pressures in mid-2023. [International reserves remain stable at around \\$13 billion, providing a buffer for imports\[13\]](#).
3. For 2023, Angola's economy displayed a mix of challenges and progress. GDP growth for 2023 is estimated at 1.3%, with both the oil and non-oil sectors underperforming. [Despite the recent recovery in oil production, the average growth in 2023 is estimated to have declined compared to the 2022 level\[14\]](#). The slight improvement in non-oil sector performance was offset by a decline in oil production. In December 2023, Angola announced its departure from OPEC[15] due to disagreement on production quotas; the effect of this decision is yet to be fully felt.
4. For 2024, the International Monetary Fund (IMF) is forecasting Angola's real GDP growth to be 3%, slightly lower than the overall Sub-Saharan Africa average of 4%[16]. [Consumer price inflation is forecasted at 22.3% year-on-year, exceeding the regional average of 13.1%](#). The IMF forecast is not significantly different from the Angolan government's 2024 budget which assumes that economic growth in the country will accelerate to **2.8%** in the year due to a significantly stronger performance in the non-oil sector (4.6%) and a lower contraction in the oil sector (-2.5%) from the previous year.
5. According to the UN data portal (2022)[17], Angola's population is estimated at about 35.6 million people and projected to reach about 37.8 million people by 2024. Angola's population is growing at about 2% annually; the birth rate is 38.6 births per 1,000 people and the fertility rate is 5.04 births per woman.
6. **Poverty and Food Security** – The country faces significant challenges in terms of the development of basic social services and the persistence of social inequalities, including gender inequalities. The UNDP Human Development Report 2023 indicates that in 2021, 51% of the population (17.63 million people) lived in multidimensional poverty, 32.5% in extreme poverty and 15.5% (an additional 5.4 million people) were vulnerable to multidimensional poverty. The GINI index, which stood at 51.34 in 2018[18], testifies to the depth of inequality, although encouraging developments have been observed since 2021, as shown by the inequality-adjusted HDI (which fell by 30.5%, bringing this HDI down to 0.407[19]), the gender inequality index (GII, which stands at 0.537) and the gender-related development index (GDI, which is established at 0.903). However, the persistence of poverty and inequality contributes to the country's poor ranking on the Human Development Index (148th out of 191 countries and territories). Rural populations, especially young people and women, are most affected.
7. Angola's vulnerability to food insecurity strongly links to the recurring droughts, and related/associated disasters (including crop failure, water shortages, livestock diseases, land degradation, low income/limited household assets, etc.). Severe food insecurity continues to affect the livelihoods of many families due to cyclical droughts in the southwest of the country. Angola was ranked 97 out of 116 in the 2021 Global Hunger Index. Although the number of undernourished people has decreased, **food insecurity and undernutrition remain serious public health problems**. This is driven by a range of factors including poverty, limited dietary diversity, poor sanitation and hygiene conditions, and gender inequality[20]. Rainfall shortages in the south and centre of

the country significantly reduce agricultural production, **which is the main source of food for rural households**. The generalized rise in food prices also restricts households' purchasing power. High levels of acute food insecurity as well as inadequate care and feeding practices contribute to high levels of acute malnutrition in the drought-affected areas, together with limited access to safe drinking water, and low infectious disease-vaccination coverage.

8. The Angolan inland fisheries and small-scale aquaculture sectors present substantial and mostly underexploited prospects for fostering local economic development. This includes addressing poverty, alleviating food insecurity, and generating employment opportunities for the local people, including youth and women. It is, therefore, a primary driver for rural development.
9. In 2021, Angola's fish production was about 531,772 tons[21]; this accounted for approximately 4.1% of the country's GDP, positioning the fisheries as the third most economically significant sector[22]. Aligned with the goals outlined in Angola's national development plan 2020-2025[23], there is an envisaged growth in the fisheries sector's GDP contribution, aiming to reach 4.5 percent by the year 2027[24].
10. It should be pointed out that the majority of fisheries production is concentrated in the marine sector, constituting 94%, while inland fisheries contribute approximately 5.7% of the overall production. Despite its relatively lower production volume, the inland fisheries sector holds significant potential to play a crucial role in the national economy, especially as source of livelihood and sustenance for rural inland communities at artisanal levels[25].
11. The primary inland water bodies (rivers) that support inland fisheries include: a) Chiloango (in Cabinda Province); b) Congo (Zaire); c) Cuango (Lunda Sul); d) Cassai (Lunda Sul); e) Kwanza (Bié to Luanda); f) Cunene (Huambo to Namibe); g) Zambeze (Moxico); and h) Cubango (Huambo to Kwando Kubango). The Kwanza River, entirely situated in Angola, is the second-largest river after the Congo River. In addition, there are five significant lagoons and numerous medium and smaller sizes, located in the provinces of Kwanza Norte, Huambo, Bié, Cunene, and Moxico. Inland fish catches are predominantly comprised of tilapia (*Oreochromis andersoli*, *Tilapia rendali*, *Oreochromis niloticus*), African catfish (*Clarias gariepinus*), and carps (*Cyprinus carpio*), with most of the catch attributed to artisanal fishers. However, there is scanty scientific information regarding fish production capacity of the inland lagoons and rivers, water quality issues and ecosystem health.
12. Angola's inland fishing operations are exclusively artisanal, encompassing both commercial and subsistence activities, and do not involve semi-industrial fisheries. The inland fishing areas consist of small to medium-sized artificial and natural lakes, rivers, and expansive floodplains. Due to the absence of a census for this sub-sector, there are no reliable estimates available for the number of fishers and boats. Fishers are regarded as one of the most vulnerable groups within Angola's rural population. The country's aquaculture sector is quite young but possesses considerable potential.
13. Despite Angola's abundant inland aquatic resources, numerous challenges persist. These include: a) limited literacy and awareness of nutrition and climate change-related issues among the fishing communities; b) weak or lack of sustainable lagoon management systems; c) limited community access to inland fisheries for both nutrition and income generation; d) lack of technical skills in aquaculture production among the target communities; e) limited access to technology, inputs, advisory services and support; f) scarcity of technical information regarding aquaculture suitability in the target areas; g) weak or lack of input and output market linkages; h) scarcity of aquaculture-linked enterprises and limited access to finance; i) poor infrastructure; j) market asymmetries; k) seasonal concerns; l) general system inefficiency; and m) lack of widespread business vision among all involved actors[26].
14. Thus, achieving and sustaining an annual inland fisheries production of 5.7% (30,000 tons) highlights the necessity for the adoption of innovative technologies to ensure the sustainable utilization of inland aquatic resources. Field visits and observations in sampled lagoons indicate a requirement for improvements, including the development of road infrastructure, establishment of landing sites, marketing facilities and linkages, and the provision of training to fishers in sustainable fishing practices and value addition techniques[27]. These measures aim to enhance production levels and strengthen market linkages.
15. **National Strategies, Policies and/or Programmes relevant for Smallholder Agriculture, Fisheries, Rural Poverty Reduction and Enhanced Food Security** – The development framework for Angola is based on the medium-term National Development Plan (PDN, 2023 – 2027), aligned to the long-term development strategy – Angola 2050.
16. GoA positions aquaculture as the backbone of fish production in the country, as defined the PDN 2023 – 2027 and the PLANAPESCA. Interventions in the fisheries sector are being supported by the following legal framework: a) the presidential decree of no.8/23 of 2023 defining the management measures for marine fisheries, continental fisheries, aquaculture and salt; b) presidential decree no. 139/13 of 2013 defining the continental fisheries regulation; c) presidential decree no. 39/05 of 2005 and presidential decree no 41/05 of 2005 defining aquaculture and general fisheries regulations, respectively; and d) the presidential decree no. 43/05 of 2005 defining the fisheries monitoring regulation.
17. Food and nutrition security is guided by the National Food and Nutritional Security Strategy of 2009, supported by the National Plan for the Promotion of Grain Production (PLANAGRAO), Fisheries (PLANAPESCAS) as well livestock (PLANAPECUARIA), and to promote climate change resilience in the production sector, the National strategy for climate change 2018-2030 has been established.
18. Internationally, Angola is a party to a number of protocols and conventions that are relevant to AFAP-2, including the: a) Convention on Biological Diversity[28]; b) Voluntary Guidelines for Securing Sustainable Small Scale Fisheries[29]; c) United Nations Convention on the Law of the Sea[30]; and d) [Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing](#)[31].
19. In general, AFAP-2's goal and development objective are consistent with the various national policy instruments and will directly contribute to the achievement of these national policies, plans and strategies.

20. **Key Actors and Institutional Arrangements** – Rural development in Angola follows a multi-sectoral approach, which integrates various government ministries. Key actors include: a) Ministry of Social Affairs leading the implementation of the integrated plan for poverty reduction; b) Ministry of Agriculture and Forestry responsible for the national agricultural policy; c) Ministry of Fisheries and Marine Resources – this is Lead Implementing Agency for AFAP-2; d) Ministry of Environment; and e) Ministry of Industry and Commerce, leading implementation of integrated programmes for rural commerce development. AFAP-2 is aligned with relevant development strategies and will seek to promote engagement of the stakeholders through the establishment of the multisectoral project steering committee, at national level and provincial levels.

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

21. **Climate Change and Environment** – Angola's climate is influenced by the cool sea currents especially along the coast and similarly by the altitudes in the plateau found in the interior part of the country. Rainfall decreases rapidly from North to South between the Atlantic coast and the countryside and from the Northwest to the Southeast. Therefore, the climate changes from "humid" to "semi-arid", in the south-east where the influence of the Kalahari Desert is well known. Rainfall variability from one year to the next is generally high with the southern part of Angola being frequently affected by extreme weather events, such as heat waves, droughts, floods and storms. Angola is experiencing rising temperatures, changing precipitation patterns and more frequent extreme weather events, such as droughts and floods. In addition, coastal areas are vulnerable to sea-level rise and associated risks, threatening coastal communities and infrastructure. In terms of impacts on the fisheries sector, rising sea levels and increased water temperatures are leading to changes in the coastal ecosystem, affecting the growth and survival of farmed species^[32]. Also, extreme weather events, such as floods and cyclones, can cause severe damage to aquaculture facilities and infrastructure, leading to economic losses. Changes in ocean chemistry due to increased carbon dioxide absorption are also impacting shellfish and other calcifying species, affecting their growth and development^[33]. To address these challenges, sustainable aquaculture practices and climate resilient infrastructure design, is crucial^[34].
22. Angola's mean land surface temperatures are likely to surpass the increase in global mean land surface temperature in all seasons with projected warming of between 3.4- 4.2°C, exceeding natural climate variability. Although rainfall models vary, there is broad agreement that rainfall levels will decrease in the future, with a stronger decrease in the southern part of the country. The south-western region of the Southern Africa, which includes Angola, is marked as a climate change hotspot, indicating increased evapotranspiration caused by the higher temperatures, a significant decrease in precipitation and increases in the number of consecutive dry days^[35]. Overall, recurrent drought linked to climate change have not only aggravated food insecurity, water pollution, human-wildlife conflicts, reduced fodder and pastures for livestock and wildlife, but have also reduced water availability and access due to drying up ground water recharge as well as land degradation (vegetation and soil degradation).
23. Angola possesses a rich and diverse biodiversity with a wide range of ecosystems supporting unique flora and fauna. Its biodiversity is characterized by numerous endemic and rare species, making it a region of high conservation value^[36],^[37]. Angola's biodiversity faces threats from habitat loss, deforestation, poaching, and the impacts of climate change^[38]. Concerted conservation efforts and sustainable management practices are crucial for the future well-being of Angola's flora and fauna^[39]. Angola's forests, which cover almost 18.4% of the land area, provide essential ecosystem services, including carbon sequestration, soil conservation and water regulation. However, these forest resources face significant challenges from deforestation, illegal logging and land-use changes, which can lead to habitat loss and environmental degradation^[40]. Angola has 47 major river basins, albeit water distribution is uneven, with surface flows highest in the centre, north and north-east^[41]. Addressing water scarcity, particularly in the south and improving access to clean water, is crucial for enhancing public health, reducing poverty and promoting sustainable development in Angola.
24. **Gender**– There is widening gender inequality in Angola. Angola's overall Global Gender Gap score is 0.657, positioning it at 119 out of 153 countries, which is one of the highest in the world^[42]. The HDI (2019) is 0.581, positioning Angola at 148 out of 189 countries^[43]. Women constitute 51% of Angola's population but they face underrepresentation in politics and in decision making bodies. Angola's literacy rate is 71.1% (82% male, 60.7% female)^[44]. Female participation in the labour market is 76.1% compared to 78.9% for men. Women in rural areas constitute 70% of the small-scale subsistence farmers and almost contribute all the labour. In Angola, 27% of women are less likely to be salaried workers compared to 40% of men. As for employed women, 81% are in vulnerable employment compared to 54% of men^[45].
25. Several constraints exacerbate gender inequality: access to productive resources (inputs, finance, and knowledge), lack of access to education, market access, drudgery, drought, and low income and employment opportunities. Gender gaps in access to resources (such as agricultural production factors and employment and education) have long term impacts on family incomes and structural transformation. Men own the means of production (land, livestock and finance) and women provide most of the labour (for crop cultivation, conservation, processing, marketing of food crops and family nutrition security).
26. **Youth** – These are defined as people aged 15 to 35 years^[46]. The Angolan population is a youthful country. About 19% of the population are aged 15-24 years and 66% of the population are less than 25 years old. In the northern and central provinces of Bie, Bengo, Uige, Malanje and Cuanza Norte, 35% of the population are youth^[47]. The youth face many challenges in areas of education, employment, access to productive resources (land and finance), lack of decision-making roles, lack of entrepreneurial skills and basic nutrition. A large number of youths migrate to urban areas, where some go to school and gain formal employment. Migration levels are highest for the age group 25 to 35 years. Youth unemployment is estimated to be 59.8 percent of the total unemployed. The 2021 total youth unemployment is 18.5% (18.2% males and 9.1%)^[48]. The youth in rural areas are

engaged in subsistence agriculture and are involved in family-based livelihood activities (handicraft, fishing and small shops). Youth have challenges to access finance and a low level of education.

27. The youth are less attracted to agriculture since they prefer enterprises with quick returns. Among the San communities, youth participation in agriculture varies, with some interested in the quicker results and gains from horticulture.
28. **Marginalised Groups** – The marginalised people consist of Persons Living With Disabilities (PLWD)s, ex-combatants, displaced and landless people. There are 658,258 **PLWDs** in Angola (365,547 urban and 290,710 rural)^[49]. The prevalence of disability is 2.5% with 56% male and 44% female. Of these, 56% reside in the rural areas. The most prevalent forms of disabilities include mental (10%), sensory (28%), and motor disability (62%). Disability is caused by the effects of four decades of civil war, deficiencies in health, limited access to prevention programmes, effects of diseases, low educational levels of families, the hidden attitude levels on disability, and high road accident rate. The long civil war has caused several physical and emotional stress resulting in human handicap. Since 2011, the Government has set up a law on social inclusion of handicapped children and the regulation on open spaces and walking places for handicapped persons. These handicapped persons are also organised into 18 federations and associations to represent their social categories and advocate for more support from the state and development partners.
29. With regard to **Indigenous people (IP)**, there is limited information on the existence of IPs in Angola. GoA does not recognise the concept of IP and there is no reference to IPs in the Constitution. The marginalised ethnic groups in Angola include the San and Himba and other smaller groups (Kwisi, Kwepe, Kiwali and Zemba). The San and Himba are situated mainly in the southern provinces of Huila, Cuando Cubango and Moxico. The Kwila, the Kwele and Zemba speak the Herero language. The total population of the marginalised is estimated to be 25,000^[50].
30. For **ex-combatants**, following the end of civil war that lasted from 1975 to 2002, close to 80,357 ex-combatants were demobilised in all the 18 provinces of Angola. In 1995, GoA created a Ministry in charge of Former Combatants and Motherland Veteran. In order to support the socio-economic integration of the ex-combatants, an Inter-Ministerial Commission for Coordination of socio-economic Reintegration of ex-combatants and homeland veterans (spanning across various ministerial departments). The objective of the Commission was to support these sensitive and fragile categories in the areas of health, finance, agriculture and social affairs.
31. **Nutrition** – Angola ranks 97 out of the 116 qualifying countries in the 2021 Global Hunger Index with a score of 26^[51]; this implies that the country "suffers from a level of hunger that is serious". Malnutrition remains a pervasive challenge, with UNICEF estimates of 3.9 million children with severe acute malnutrition admissions among 6 to 59 months old children in 2021. Angola has made no progress towards achieving the target for stunting, with 38% of children under 5 years of age affected; this is higher than the average for the Africa region (30.7%)^[52]. The stunting rates remain very high in the AFAP-2 target provinces: Bie 51%, Bengo 40%, Malanje 32%, Cuanza Norte 45% and Uige 42%^[53]. Undernourishment affected 17%, wasting 8.2%^[54], and overweight affected 3.4% (2015)^[55] of the children under 5 years in Angola. In addition, the prevalence of thinness (10.6% for boys and 5% for girls), overweight (16.9% girls and 8.7% boys) and obesity (3.8% girls and 2.4% boys) in children and adolescents (aged 5-19 years)^[56], show that the boys are thinner, less overweight and less obese than girls. The infant and child feeding practices are poor with 37.4% of infants aged 0 to 5 months being exclusively breast fed, and an estimated 14.5% of adult women and 5.2% of adult men living with obesity^[57] which features predominantly among urban dwellers.

c. Rationale for IFAD involvement

32. The Artisanal Fisheries and Aquaculture Project (AFAP)[\[58\]](#), implemented during the period 2015-2023, successfully demonstrated that small-scale inland fisheries can significantly contribute to better rural livelihoods through increased incomes and improved food and nutrition security. Some of AFAP's achievements include: a) income increases for 82% and 80% of households in the target communities around lagoons and in communities targeted with aquaculture activities, respectively; b) an increase in the number of households taking three meals per day from 26% to 33%; c) an increase in the availability, access and consumption of fresh fish in target communities and beneficiaries; d) more people found it a lot easier to diversify their food consumption than before (27% of the target beneficiaries); e) an average aquaculture productivity of 5kg/m²/year; representing an achievement of 208% compared to the target.
33. However, AFAP also established that there are still some aspects of the subsector that need to be addressed in order to make it a more competitive and sustainable conduit to improved rural livelihoods. Some of such challenges include: a) inadequate inland extension service provision; b) lack of appropriate infrastructure and equipment; c) a need for more effective market access arrangements; d) limited access to quality aquaculture inputs (seed and feed); e) limited availability of a skilled workforce and technical knowledge on aquaculture value chain; f) lack of a supportive policy environment to help guide and protect the growth of the subsector; etc.
34. Based on AFAP's experience, GoA has expressed the desire to make the inland fisheries subsector an avenue through which rural livelihoods, food and nutrition security can be sustainably improved. In fact, aquaculture is being positioned by GoA as the 'backbone' of fish production in the country as defined in the national development plan (PDN 2023 – 2027) and the PLANAPESCA. Fish production from aquaculture is projected to increase from 2,808 tonnes to 8,385 tonnes between 2023 and 2027 (and further projections of 555,137 tonnes in 2050, which appears overly ambitious). Capture fisheries is projected to experience a 36.8% decrease from 593,252 tonnes to 374,694[\[59\]](#) between 2023 and 2050. Among the strategies to expand aquaculture growth are: a) increased private sector investment in the production of key aquaculture inputs, including seed and feed; b) rehabilitating and expanding the capacity of state-owned aquaculture facilities; c) strengthening aquaculture extension services; d) opening up new areas for aquaculture; e) strengthening market linkages; and f) building the skills and capacity of farmers. AFAP-2 will contribute to this effort by supporting most of these pathways. The Project anticipates a 20% increase in aquaculture production and capture fisheries production maintained at sustainable thresholds.
35. In addition, there is a desire by GoA to increase productivity and production of fish for domestic consumption as a means of import substitution/reduction of imports, especially from China. There is a high demand for fish/fish products in Angola, with an annual per capita fish consumption being estimated at 20.2 kg/person/year[\[60\]](#). However, the domestic fishery industry is not able to meet the demand; therefore, substantial quantities of frozen fish and fish products are imported every year. In 2018, imports of fish and fishery products were estimated at about USD 198 million and exports at USD 81 million[\[61\]](#). Accordingly, GoA has requested IFAD to liaise with its development partners and support an intervention to: a) scale-up AFAP's tested and proven technologies to other parts of the country to not only help improve income/reduce poverty, food and nutrition security but also reduce fish imports; and b) address the inland fisheries' challenges, as identified by AFAP, in order to provide a firm foundation for the sustainable growth and expansion of the subsector. In the process, GoA has put emphasis on the need to address the inherent technical, social, environmental and climate change-related aspects to make the interventions more effective and sustainable. IFAD, therefore, brings strong comparative advantages of technical knowledge, sector experience and networks developed under AFAP. Besides, IFAD has a growing portfolio of fisheries and aquaculture programmes in ESA region which AFAP-2 can tap on for SSTC learning exchanges.

B. Lessons learned

36. There are a number of experiences that have been drawn upon to inform the AFAP-2 design. The experiences are sourced from IFAD-supported interventions in Angola and other countries. They have also been sourced from similar/related projects financed by the Government or its other development partners. The lessons of experience that are relevant to the Project and how they have influenced its design are presented hereunder:
37. *Country and Local Context and Capacities*– Ensure project design and assumptions match the country and local contexts and the capacities of local institutions to deliver the project results. AFAP was designed as an investment project in the fisheries and aquaculture sector, and several assumptions were made that could not be realized during implementation. For instance, the Food and Agriculture Organisation (FAO) of the United Nations was to play a role in the implementation of some of the AFAP key activities; their participation did not materialize. As a result, AFAP struggled to effectively get some of those activities initiated and, consequently, was significantly restructured during the MTR from an investment project to a pilot project taking into account the local capacities; this enabled the project to deliver good results at completion. Accordingly, AFAP-2 design has been simplified and included an intervention on institutional/capacity strengthening for the different institutions so as to effectively deliver the Project results;
38. *A Participatory Design Process* – A design process that involves consultations with local government and beneficiary communities, is a necessity in order to deliver interventions that are relevant and responsive to the needs of government and the target communities, with a good outreach to poor women and men[\[62\]](#). AFAP-2 conceptualisation and design processes were consultative and ensured involvement of national, provincial, municipality and local leaders and beneficiary communities' representatives;
39. *Comprehensive approach to aquaculture* – Aquaculture is new in many communities and its uptake requires good understanding of local context, careful planning, capacity building, availability of inputs/services. Under AFAP, aquaculture was successfully introduced in Malanje Province on a pilot basis, with the following lessons: a) collective aquaculture production is more effective and profitable than isolated farms due to shared costs and services; b) aquaculture technology and methods should take into

account the local context (e.g. soils, water, slope, farmers' capacity, etc.); c) for climate adaptation, include water supply systems in the design of the aquaculture farms (e.g. water reservoirs, canals etc.); d) make provisions for farmers' training and extension services; e) develop marketing strategies and linkages to nearby markets. The design of AFAP-2 has taken on board all these lessons;

40. *Lagoon Management Plans (LMP)* are necessary as a good technical tool to enhance fair and sustainable exploitation of lagoon resources. However, further community sensitization on the LMP is needed, and a clear linkage to national policies and regulations to legally accommodate and protect LMP and Community Council of Fisheries (CCP) structures. Under AFAP-2, adequate awareness creation, community mobilization and social development of the target communities will be the first activity before all other technical activities can be initiated. In addition, development and adoption of a community-based fisheries production and management policy is one of the targeted interventions under the policy engagement support arena. This would provide the needed legal basis for the development and functioning of LMP and CCP structures;
41. *Integration within Government Systems and Services for Sustainability* – It is more realistic to work through government existing extension systems, but when such a system is missing (e.g. IPA did not have an existing Inland Fisheries extension system), it may be more effective to ask the relevant government institutions to provide the project with staff to be trained and used for project delivery rather than engaging new extension workers that the Government may not employ afterwards. Considering that IPA's Inland Fisheries extension system is still very weak, the participating Government institutions at the national and provincial levels will provide staff to be trained and serve as extension agents under AFAP-2;
42. *Infrastructure Interventions* – It is vital to incorporate key value chain infrastructure in rural development programmes to achieve impacts. However, it is important to front load implementation of infrastructure interventions^[63]. The time taken to complete infrastructure feasibility studies and procurement of the requisite works/services delays completion and impacts on sustainability, and realisation of benefits. The AFAP-2 design and implementation will frontload infrastructure activities for effectiveness;
43. *Good Planning is key to Successful Infrastructure and related Interventions* – With infrastructure interventions, it is critical to strengthen the planning, design, implementation and supervision capacity to ensure the infrastructure's effective development and sustainable use^[64]. AFAP-2 has infrastructure interventions under Component 2 and an allowance has been made to ensure that adequate supervision capacity is provided for technical compliance at all stages - feasibility study, design, construction and handover. In addition, capacity building for infrastructure management will be enhanced;
44. *Priority attention to market development and linkages* – Commercialization of smallholder farmers by strengthening their organisations, offering production support, enhancing market facilities and establishing contracts with traders and producer organisations, project participants saw a 50% increase in income per year and 5% increase in market access in monsoon season under IFAD's engagement in Nepal. AFAP-2 is putting particular emphasis on market linkage through Component 2. Specific interventions seek to strengthen the targeted beneficiaries' groups, link them to the Smart Fish Kiosks for forward (selling of fish/fish products) and backward (access to inputs and advisory services) linkages;
45. *Inclusive Targeting* – Incorporating social development approaches is important to enhance inclusion of the most vulnerable households in rural areas of Angola facing multiple development challenges. This enables such beneficiaries to more effectively use the opportunities and resources made available by the project to improve their livelihoods. AFAP put social development activities at the forefront of its interventions, including adult literacy classes, nutrition education, women empowerment, and collective action through cooperatives and CCPs, among others; this contributed positively to the project's results. For instance, adult literacy classes enabled beneficiaries to be able to read and write at the basic level, which enhanced their abilities to make livelihood choices, plan farming activities, proper use of farm inputs, reduce post-harvest losses, better nutrition, keep farm records, etc. AFAP-2 has employed a similar approach of inclusive targeting;
46. *Climate Change Consideration* – When climate change is an important and real threat in the Project area, climate change adaptation should be prioritized in development interventions to ensure sustainability of investments and impacts of projects. AFAP made an effort to promote climate change adaptation but it was inadequate. Consequently, the Project experienced some of the extreme effects of climate change with significant consequences on the investment costs and results. In December 2022, the pond infrastructure developed by the project, at the Kamibafu Aquaculture Centre in Malanje Province, were completely destroyed by unprecedented floods. The facility is supposed to play a vital role in the provision of fingerlings to farmers. It is therefore important to incorporate climate change adaptation measures in the planning and implementation of fisheries and aquaculture investments. This aspect is well covered in the AFAP-2 design through the climate resilient infrastructure development;
47. *Land Access* – When cooperatives/communities are planning to undertake a long-term investment, it is advisable to ensure legal ownership of the land prior to commencing the investment process. The documents that guarantee the beneficiaries the use of the land where it intends to invest must be obtained before making any investments. During the implementation of AFAP, one aquaculture cooperative encountered a challenge related to land ownership, especially after its economic potential was established. Fortunately, the government was able to step in and protect the cooperatives' interests. According to Angolan Land laws, the land is primarily owned by the state. However, to promote rural productive sectors and efforts towards poverty eradication, the GoA can concede land rights for productive purposes to individuals and farmers groups (cooperatives). AFAP-2 will put particular emphasis on verification of land-use rights of the target beneficiaries prior to investing Project resources. If need be, the Project will engage local administrations to support the target beneficiaries with legalization of land.
48. *Community Participation in Procurement* – Involving local institutions and communities in the provision of goods and services for the Project increases ownership, commitment and positive results for poverty reduction. However, use of local service providers may require more training support from the Project to meet the basic procurement requirements. Accordingly, where appropriate, AFAP-2 will involve local institutions and communities in the provision of goods and services and this will be accompanied with the requisite capacity building interventions to ensure compliance with the procurement requirements; and

49. *Financial Management* –: a) AFAP faced constraints with hard currency transfers due to restrictions and bureaucracy on foreign currency transfers and payments. This negatively affected project implementation and increased the number of direct payment requests from IFAD; b) the internal audit function was never provided despite it being a loan covenant; c) PRIMAVERA Accounting Software used had no budget, procurement, or fixed asset modules and part of the accounting and reporting was done manually by exporting data to Microsoft Excel, which was prone to errors; d) in some cases, there was no sufficient counterpart contributions to pay tax liabilities. These lessons were used to inform AFAP-2 design with the objective of limiting or eliminating the observed negative consequences.

2. Project Description

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

50. **Project Goal and Objective** – AFAP-2's goal is to '*contribute to improved household income, food and nutrition security through sustainable and climate resilient fisheries and aquaculture*'.
51. **The Project Development Objective (PDO)** is to '*contribute to the reduction of rural poverty and food insecurity of smallholders in the target provinces by developing their economic potential while improving natural resources management capacity and resilience to climate change*'. The Project will be implemented over an eight-year period.
52. **Geographic Area of Intervention** – Based on the understanding reached with GoA, it is better to consolidate resources in a few provinces for greater impact and maintaining a focus in rural areas, in line with IFAD's mandate. AFAP-2's geographic areas of intervention will, therefore, build on provinces piloted under AFAP and scaling to selected new provinces. Accordingly, AFAP-2 geographical targeting will include the following five provinces: Bengo, Bie, Cuanza Norte, Malanje, and Uige. The choice of these provinces, in agreement with the Government, was based on a logic of scaling up the positive achievements of AFAP and combines several criteria, including: a) the geographic proximity to the AFAP provinces and relevance to the Project's double focus on fisheries co-management and aquaculture potential; b) the necessity to converge IFAD's interventions where they will have a significant impact on poor and vulnerable populations, particularly those most affected by food and nutrition insecurity.
53. The Project area boasts rich, diversified watersheds drained by major rivers such as the Zaire, Kwanza, Kuando and Kubango and their various tributaries as well as many others streams, and giving it significant water resource potential. The intervention area covers about 260,600 km² (21% of the country) and includes 6.05 million inhabitants (about 17% of the national population)^[65]. About 51% (3.1 million) of the target area's population are women and nearly 33% (2 million) are youth (aged 15-34 years).
54. It is expected that implementation will employ a progressive territorial deployment where much of the first focus will be given to the AFAP provinces of Bengo, Kwanza Norte and Malanje in order to consolidate the previous investments made and to scale up the positive results of AFAP. Progressively, the project will be extended to the provinces of Uige and Bie. Within each province, AFAP-2 will seek to start in those basins where there is already a potential supply and demand for aquaculture services and a dynamic aquaculture activity and, through a knock-on effect, will gradually extend to areas with high aquaculture potential but low value in the province of intervention. Artisanal fisheries interventions will follow a similar granular approach, starting with the lagoons and river systems in the provinces where AFAP was implemented in order to consolidate the co-management results, which will inform the interventions in the new provinces.
55. With regard to the selection of municipalities and specific communities, AFAP-2 will draw on the experience of AFAP to define a detailed set of criteria to guide the process. The criteria could include the following factors: a) poverty index; b) vulnerability to food and nutrition insecurity; c) climate change vulnerability; d) presence of suitable inland fisheries ecosystem (lagoons, rivers, reservoirs); e) availability of suitable sites for the establishment of aquaculture; f) potential to develop an aggregated enterprise; g) locations that are not ecologically sensitive etc. Involvement of the local leadership will be fundamental in ensuring relevancy of the selection process and ownership of the eventual outcome. To that effect, selection of the target municipalities will be undertaken in consultation with the Municipal Administration, taking into consideration the following factors: a) the demographic importance of the population; b) the necessity of concentrating IFAD's interventions and the possibilities of synergy/complementarity with existing or future programmes; c) the possibility of cooperation with GoA's other development partners in the area. This would contribute to creating a substantial density of interventions with the objective of increasing the impact of support and strengthening the economic integration and stabilization of rural youth and promote the empowerment of women; etc.
56. **Target Groups** – AFAP-2 will directly target a total of 31,000 vulnerable, poor and disadvantaged rural households engaged or willing to engage in artisanal fisheries and aquaculture. This corresponds to about 148,000 household members. The target group includes individual fish farmers (or aquaculture promoters), cooperatives or groups, small family farms, rural households including those headed by women, active rural women and youth or with diversified potential for economic and professional integration in aquaculture linkages. The project will focus, particularly, on rural communities that are economically and socially vulnerable, such as: a) artisanal fishers who are food and nutrition insecure; b) people with disabilities; c) ex-combatants and other disadvantaged groups; d) people affected by climate change and/or people living with HIV/AIDS, etc.
57. The target group are classified into three categories: a) Category 1 (C.1) – represents about 10,000 very vulnerable and poor households; b) Category 2 (C.2) – represents about 20,000 vulnerable households (small-scale artisanal fishers, aquaculture farmers, local economic initiatives); and c) Category 3 (C.3) – brings together 1,000 local actors in the form of micro, small and medium-sized enterprises, formal or informal, already active in local supply chains, performing functions such as supply of inputs (fingerlings and feeds, trainers, processors, aggregators, marketing of fishery and aquaculture products, etc.). They are the bearers of economic initiatives and, for the most part, in one of the related professions. The project's support will enable them

to strengthen their role as suppliers or driving forces in local supply chains, developing equitable business relationships with C.1 and C.2. For all field activities, 40% of target households will be female-headed, 30% will be youth-headed, while the people living with disabilities and other vulnerable groups will account for 5%.

58. *Indirect Beneficiaries* – Overall, people in this category may be more than the direct target beneficiaries and these will include: a) fresh water fish consumers who will benefit from increased access to consistent supplies of good quality fish/fish products; b) communities/households living in the vicinity of AFAP-2 locations but not members of the target cooperatives. These will benefit from Project initiatives such as boats and other equipment provided to the CCPs, and the infrastructural investments to be made on landing sites in lagoons, roads, the hatchery and other investments for communal use (such as VIP-latrines, portable water supplies, etc.).
59. **Targeting Strategy** – The project will implement a participatory, inclusive and flexible targeting strategy based on a multi-dimensional targeting approach: a) geographical targeting of production basins and socio-economic targeting; b) direct targeting; and c) self-targeting. All these approaches will be backed up by facilitation and empowerment measures to promote fisheries and aquaculture entrepreneurship and increase opportunities for the vulnerable to be included in economic activities likely to improve their well-being. The mechanisms selected will be based on eligibility criteria to be established in a participatory, transparent and collaborative manner with the stakeholders in the sector and those supporting the development of climate change resilient lagoon fisheries and aquaculture. As a starting point, awareness-raising, nutritional education, the targeting mechanism and the eligibility criteria for the economic initiatives to be submitted through the applications, will be carried out for potential beneficiaries and will cover the entire population of the intervention localities.
60. *Targeting Approach* – *The project will have a differentiated targeting approach for C.1 and C.2 target groups, on the one hand, and C.3 on the other:*
- For C.1 and C.2, targeting will be implemented in two phases. Firstly, because of the dispersion of the Angolan population (around 20-29 inhabitants/km²), geographical targeting will focus on areas of concentration in each province where there has been an increasing level of public or private sector investment in inland fisheries and aquaculture production and/or local supply chains of the fisheries or aquaculture sector. In each selected area, beneficiaries of categories C.1 and C.2 will be identified, with the local leadership and communities themselves playing a key role in the identification and selection process; and
 - For the C.3 micro-entrepreneurs, targeting will be implemented by the support organisations (in charge of business and social engineering) and the provincial technical directorates in charge of sector development, monitoring and regulation.
61. *Beneficiary Selection Process* – The Project will seek to ensure that the process is participatory and transparent in order to select deserving sectors of the population, with particular emphasis on women and youth as priority beneficiaries. Awareness-raising campaigns will be organized in all participating province and municipalities. Subsequently, with the support of the local administrative authorities, the responsible service providers will facilitate the establishment of local beneficiary selection committees, composed as follows[66]: a) the Soba administration or the corresponding local authority; b) two women's representatives; c) two youth representatives; d) a representative of the local authority in charge of regulating small-scale inland fishing and aquaculture; and e) a representative of the structure in charge of people living with disabilities, or a traditional authority that can ensure the inclusive nature of the community targeting mechanism to be put in place. Details of the step-by-step beneficiaries' selection process are presented in the PIM.
62. *Women and Youth Facilitation and Empowerment* – The Project will adopt measures to build the capacity and confidence of the target women and youth with little or no voice and empower them to participate more actively in planning and decision-making. Barriers to women and youth participation will be identified and explicitly addressed through awareness-raising and capacity-building activities on social inclusion, facilitation and technical support by service providers. The facilitation and empowerment aspects will include: a) development of training or community activity facilities; b) provision of kits and equipment that reduce the arduousness of work and adapted (taking into account the specific needs mainly of young girls); c) adaptation of adapted time slots, (iv) implementation of a specific support, listening and dialogue system with young people and women (close coaching in entrepreneurship, fisheries and aquaculture management, income-generating management, organization management, women's leadership, community management, savings-credit,...), etc.
63. *Gender Focus* – AFAP-2 is a gender-sensitive project and, as such, it will develop a Gender and Social Inclusion Strategy with specific action plans based on the identified issues constraining their active and beneficial participation. The actions to be undertaken in the implementation of AFAP-2 will aim to support the development of rural women along different links of the fisheries and aquaculture chain, particularly fish processing and marketing. To this end, the Project will provide them with structured support better adapted to their specific needs and absorption capacity, in relation to the type of economic initiative they are carrying out in the sector. Where necessary, specific capacity building will be provided to facilitate women's appropriate and effective engagement.
64. AFAP-2 will encourage women to become entrepreneurs in aquaculture production by providing them with the needed support in the establishment of ponds. However, more attention will be given to the post-harvest business opportunities, including fish processing and marketing, where women tend to have more comparative advantage. Their financial inclusion will be strengthened by supporting the development of more appropriate financial products and services, and by supporting the creation of savings and credit groups to promote the savings culture through the 'resilience fund' approach. AFAP-2 will pay particular attention to their inclusion in productive partnerships that are profitable, sustainable and respectful of equity in business relationships. Overall, the Gender and Social Inclusion Strategy will support local dynamics through GALS methodology to raise collective awareness of equity and equality issues at household and community levels in order to move towards a positive and progressive transformation of gender relations and participation of women and youth in decision-making processes in the intervention area and encourage positive behaviour on nutrition and climate change adaptation related aspects of fisheries sector. In AFAP-2 will also promote technologies and production methods that are less demanding on women workload.

65. *Youth Focus* – The inclusion of young people (men and women aged 15-35 years) will follow a differentiated approach according to their position in the fisheries and aquaculture value chains and their level of education: a) AFAP-2 will support the professionalization of young people who are already involved in the fisheries/aquaculture value chains as self-employed producers, traders or employees in these enterprises or as workers in their parents' farms; b) those who are outside the fisheries/aquaculture value chains but are interested in integrating in the different segments of the value chain to make it a profession or a business; and c) young people with a low level of education (or who are dropping out of school) and those with a higher level of education (secondary education and university degrees). Interventions will focus on capacity building (including literacy), training in the targeted/supported trades, creation of youth producer groups and organizations or participation in existing groups. Youth economic empowerment activities will target the most educated in the establishment and management of micro, small and medium-sized enterprises in fisheries/aquaculture production, service delivery, processing and marketing. They will be able to benefit from all the capacity building activities targeted for youth support.
66. *Persons Living With Disabilities (PLWDs) Focus* – In Angola, there are more than 600,000 PLWDs, most of them physically disabled [67]. Faced with this high number of PLWDs, a law to mitigate the impact of disability was passed in 2016; it aims at promoting the employment of PLWDs through the establishment of quotas, the facilitation of access to loans and free vocational training. AFAP-2's targeting strategy will take into account the type of disability, with the aim of supporting initiatives and actions in the various links of the fisheries and aquaculture value chains that are conducive to the socio-economic inclusion of PLWDs, with a view to improving their living conditions and the implementation of their fundamental rights. In order to ensure the effective participation of PLWDs, the Government has subsidized a number of associations of PLWDs that are recognized as having public utility. AFAP-2 will rely on these organizations and their provincial branches for the identification, selection and support of PLWDs. A light characterization study of aquaculture activities and related occupations favorable to the inclusion of this target group category will be carried out at the start of Project implementation, and the support provided to them will be calibrated on the basis of the findings of this study. AFAP-2 plans to target 5% of the beneficiaries to be PLWDs.
67. *Nutrition Focus* – AFAP-2 is nutrition-sensitive Project and will seek to use a prevention-focused approach to improving the nutrition status of the target beneficiaries. The main activities will focus on: a) integrated family food promotion for household consumption and local markets; b) the preservation, processing and marketing of fish/fish products; c) behaviour change communication and targeted nutrition education and social behaviour change communication; d) women economic empowerment through SMEs support; and e) nutrition focused aquaculture and fishing interventions, including "Nutri-ponds". In addition, integrated aquaculture/agriculture (e.g. fish production integrated with small livestock, poultry and vegetables) will be promoted. Support will be provided at two levels: the community level, which directly targets households, and the institutional level.
68. At community level, AFAP-2 will provide direct support for specific information, nutritional education and awareness-raising activities on the importance of dietary diversification, which will be carried out in all the provinces, municipalities and support localities in order to promote the adoption of good nutritional and food hygiene practices. The support to be provided to beneficiary households at community level is part of a continuum of interventions starting with: a) awareness-raising campaigns; b) training and support for setting up an activity (of an economic nature) in the field of aquaculture and small-scale continental community fishing; c) education in the best nutritional practices and in adequate maternal and child health care, hygiene and sanitation to reduce malnutrition in all its forms; and d) monitoring and support for the development of activities. The project will also focus on connecting the promoters of nutrition-sensitive economic initiatives to markets (inclusion in commercial partnerships, marketing, etc.) in order to bring them out of their state of vulnerability in the long term.
69. At the institutional level, the project will provide support on nutrition through participation in dialogues, contribution to the nutrition conference and participation in the consolidation of the multi-stakeholder platform. It will contribute to the nutrition of the " Food Security and Nutrition Information System (FSIS) at the provincial level. In its implementation, the project will seek to establish synergies and complementarities with other nutrition interventions in the same area. The project will strengthen the capacities of the provincial departments of the National Council for Food and Nutrition Security in order to: a) optimize the coordination of nutrition activities that will be supported by AFAP-2; b) improve the capitalization of the project's contribution to the implementation of the National Action Plan for Food and Nutrition Security; and c) monitoring the evolution of nutrition indicators in the five provinces of intervention concerned.
70. Overall, AFAP-2 nutrition interventions will seek to achieve the following: a) diversification of production within households; b) diversification of diets at the household level, particularly among women of childbearing age and children under five; c) dissemination of better food knowledge and practices within the household; d) dissemination of good post-harvest practices for fish of nutritional and sanitary quality; and e) capacity building of implementing actors.
71. *Environment and Climate Change Focus* – To improve environment and natural resources management, the focus area will be improved sustainable management of natural assets. The selection criteria for the aquaculture interventions will include water and land availability and capacity building of the target populations to improve the management of their natural resources. In order to build the climate change resilience of the target communities and their livelihoods, vulnerability mapping will be done to inform the siting of infrastructure and climate change adaptation measures that will be promoted.

D. Components/outcomes and activities

72. **Outcomes** – AFAP-2 interventions will focus on addressing the identified factors limiting the effective functioning and inclusivity of Angola's inland fisheries and the following are the expected outcomes:
1. Outcome 1: Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes;

2. Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurship and infrastructure providing services; and
3. Outcome 3: Strengthened institutions and policies for a sustainable and inclusive inland fisheries sector.
73. The AFAP-2's development objective will be achieved through the effective implementation of two technical component: a) Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems; and b) Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development. The third component, Institutional Strengthening, Policy Engagement Support and Project Management, will seek to ensure that AFAP-2 is effectively implemented, including the provision of capacity enhancement interventions. Capacity building activities will not only contribute to effective AFAP-2 implementation but will also increase the likelihood of sustaining successful Project interventions. Following hereunder is a summary of planned activities for each of the Components/Subcomponents.
74. **Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems** – The component will focus on expanding AFAP's successful interventions and lessons in climate-resilient and nutrition-sensitive fisheries and aquaculture production strategies. AFAP achieved significant strides in inland fisheries co-management and community-based aquaculture production models[68]. However, there is a need to refine the approach, emphasizing a shift towards business-oriented production to ensure long-term sustainability. The component will respond to Outcome 1 - *Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes*. This will involve the mobilization and capacity building of rural producers in targeted areas through enhanced access to technical and non-technical knowledge, skills, production assets and conducive policy environment for production and management of inland fisheries and small-scale aquaculture. It comprises two subcomponents.
75. **Subcomponent 1.1: Sustainable Inland Fisheries and Ecosystems**– This subcomponent supports the sustainable utilization of inland fisheries resources by rural riparian communities and conservation of biodiversity in selected lagoons and river ecosystems, to ensure their high productivity and long-term viability. It aims to enhance productivity in inland fisheries by replicating a tested and proven community-owned co-management system that promotes the sustainable utilization of fisheries resources, to increase food security and resilience of rural fishing communities, with a target to support 10,000 HHs. The key result areas for this subcomponent are: a) the establishment of an effective inland fisheries co-management system; and b) the sustainable utilization of inland fisheries resources for income and nutrition. It will contribute to achieving *Output 1.1: Effective inland fisheries management system developed with strong community participation*. This will be achieved through the following activities:
- *Community mobilization and social development for small-scale fisheries* – The project's success will depend on the level of community mobilization, sensitization and outreach. Involving and empowering community members in project planning, implementation, and evaluation is crucial for local ownership, collaboration, and shared responsibility within the community, enhancing the overall effectiveness of the project. The initiative concerns building the social capital of local communities to more effectively participate in project activities and draw increased benefit from the interventions. Building on the lessons and capacities developed under AFAP, the project will support public awareness campaigns, nutrition education, health and sanitation, formulation of community development plans, functional literacy training and business training as well as climate change risk management training. The project will use GALS methodology to ensure involvement of women and youth, and support behaviour change towards nutrition, health and environment. This activity will involve Technical Assistance (TA) by a competitively recruited Service Provider. The draft Terms of Reference (ToRs) for the Service Provider are outlined in the Project Implementation Manual (PIM) and will be further developed during implementation;
 - *Establishment and strengthening of Community Council of Fishers (CCPs)* – AFAP successfully piloted a fisheries co-management strategy in 3 large lagoons, involving the establishment of 10 CCPs to spearhead community participation, in partnership with the local Soba administration, IPA and other key stakeholders. This initiative resulted in notable improvements in the health of the lagoons ecosystem and biodiversity, fish stocks diversity, increased fish catches and improved livelihoods[69]. Building on this success, AFAP-2 will strengthen the existing CCPs and create new ones in areas not previously covered by AFAP. The Project will establish 50 new CCPs in 25 lagoons across the 5 Provinces, based on the criteria presented in the PIM. IPA will coordinate the establishment of CCPs with the active participation of the local Soba administration and other key stakeholders. A Service Provider will be competitively recruited to support this process. This strategic expansion of co-management system is intended to further enhance the positive impact on lagoon ecosystems, biodiversity, fisheries and local livelihoods;
 - *Develop effective inland fisheries monitoring, control and surveillance (MCS) system* – The process will involve training and capacity building to enhance the capabilities of CCPs and community members in sustainable inland fisheries and ecosystem management strategies, regulations, community group dynamics, and conflict resolution mechanisms. IPA will conduct this training using modules outlined in the PIM and aligned with national fisheries and environmental regulations. In order to operationalize the system, the project will provide surveillance tools and equipment to support the CCPs in their tasks. Each CCP will be provided with equipment package for transport, communication and personal safety including a boat with an engine, torches, raincoats, gumboots, walkie-talkies, solar lamps etc. In addition, the project will assist the CCPs in maintaining equipment and operational expenses, while supporting IPA and the CCPs to develop mechanisms for operational and financial independence of the co-management system. Among the options to be explored for future sustainability includes levies on fish sales and the willingness of the Provincial/ Municipal Governments to provide support to CCPs through their administrative budgets. It is noteworthy that the central Government will continue to cover the regular costs (e.g. salaries) of IPA to support CCPs beyond the project;
76. The MCS intervention will play a pivotal role in ensuring sustainability, compliance, and resilience in the management of fisheries. While IPA will have the overall responsibility for this process, the active involvement of Study, Planning and Statistics Office (GEPE) of Government of Angola will be critical as the national entity tasked with data processing, storage and publication. The project will facilitate CCPs with tools such as weighing scale, measuring boards, record books, and pens for data collection, recording, and reporting. It will engage TA to support GEPE in developing data collection templates and to provide training to the CCPs on data collection, recording and reporting. The TA will facilitate the development of a robust data

capture, processing and storage system, and facilitate proper training and capacity building sessions to enhance GEPE's overall capacity in these critical areas, including conducting frame survey, annual Catch Assessment Surveys (CAS) and Stock Assessments (SA) outputs. These assessments are designed to gauge fishing pressure and generate fisheries statistics essential for efficient management. IPA, with support of GEPE, will take responsibility for supervision of the data collection and producing the annual CAS reports.

- *Development of inland Lagoon Management Plans (LMPs)* – Angola's inland fisheries ecosystem encompasses diverse lagoons and rivers with significant fisheries resources and supporting community livelihoods. Unfortunately, these lagoons and rivers remain underutilized, primarily due to poor access, insufficient information and communities lacking the right tools and equipment, while the absence of management plans is a major constraint for their sustainability. The introduction of LMP becomes imperative, offering a comprehensive approach to facilitate the sustainable utilization, conservation, and safeguarding of lagoons and related biodiversity. The objective of the LMPs will be to guide artisanal fisheries activities in the lagoons to conserve fish stocks, biodiversity and the environment. It will incorporate measures to avoid unsustainable fishing practices that may lead to depletion of fish stocks and biodiversity loss, environmental degradation, and impairment of fish habitats, with the ultimate goal of ensuring the holistic resilience of the ecosystem. The project will support assessment to identify potential fish breeding areas within the respective lagoons, with the objective of integrating them into the conservation and management plan. The PMU will engage a TA (Fisheries Management Expert) to support the formulation of the LMPs and the identified studies, according to the ToRs defined in the PIM;
- *Support community access to sustainable fishing inputs* This activity focuses on enhancing the ability of riparian communities to be able to access and utilize fisheries resources in the lagoons and rivers to improve incomes and household nutrition. To achieve this, the project will support awareness and training in sustainable fishing practices and access to appropriate fishing tools and equipment. A key strategy is by enabling fishing communities to acquire better fishing gears that protect juvenile fish and do not destroy the fishing ground. In this regard, the project will support a gear exchange intervention, involving the exchange of inappropriate nets with the more selective and recommended types, based on the specific context of the lagoons. The fish stock assessment will guide on the maximum number of nets that can be sustained in each lagoon, and consequently, the distribution per HH to ensure equitable access to resources with particular attention to the inclusion of vulnerable groups and avoiding elite capture. IPA will provide training, sensitization and capacity building to the beneficiaries and will spearhead the gear exchange activity. Beneficiaries contribution to the costs of gears will come from proceeds from fish sale.

77. In some riverine lagoon habitats, especially in Cuanza Norte, there are indigenous fishing practices based on flood regimes. During floods, fish enter and grow in artificial pools within the river system ("river-pool"); and when water recedes or is pumped out, the "river-pools" provide a rich source of diverse species to local communities for nutrition and incomes. The project will promote this sustainable indigenous fishing practice, but with some improvements to increase sustainability and access for the vulnerable households. IPA will select 10 (with the option to increase to 20, based on demand) of appropriate riverine ecosystems capable of supporting 'river pool' fishing, adhering to specified criteria outlined in the PIM. The main intervention by the project will be to provide appropriate fishing gear especially to the vulnerable groups (cost-shared with the beneficiaries), provide training, monitoring the impacts and scaling this practice in new suitable areas.

78. **Subcomponent 1.2: Resilient Business-Oriented Small-Scale Aquaculture Production** – This subcomponent will involve implementation and promotion of sustainable aquaculture technologies, innovations and management practices that are climate smart, nutrition-sensitive and resource-use efficient. The subcomponent contributes to *Output 1.2: Resilient business-oriented small-scale aquaculture production and distribution capacities, and extension services established*. It will enhance capabilities of small-scale fish farmers, enabling them to boost production, and foster the development of resilient businesses within the aquaculture value chain, including non-fish farming stakeholders. In addition, it aims at enhancing nutrition results by promoting dietary diversity through integrated aquaculture-agriculture interventions. AFAP succeeded in uplifting the livelihoods of the target beneficiaries through small-scale aquaculture production. This was done by addressing the key challenges within the sector. The consultations undertaken established that more needs to be done in addressing the bottlenecks in order to unlock the sector's ability to significantly contribute to improved household incomes and job creation; and ensure consistent access to fish commodities and raise the aquaculture sector's potential impact on positive nutrition outcomes. These objectives will be achieved through the following specific activities:

- *Community mobilization and social development for resilient aquaculture* – This will involve actively engaging and empowering local communities to participate in sustainable aquaculture practices, aiming to enhance the socio-economic well-being of the community. The task will be undertaken through a competitively contracted TA whose ToRs are included in the PIM. The TA will: a) facilitate the formation of production groups/cooperatives among community members engaged in aquaculture, fostering networking and collaboration among fish farmers to share knowledge, resources, and experiences; and b) conduct public awareness campaigns, nutrition education, environment, health and sanitation, formulation of community development plans, functional literacy training, business training and sustainable fishing practices including climate risk management. To effectively raise awareness, the project will use alternative communication channels (such as community meetings, workshops, and educational materials) to disseminate information on sustainable aquaculture and how to increase positive impacts on livelihoods, nutrition and the environment. It will also use household methodology (e.g. GALS) for positive behaviour changes
- *Identification and mapping of aquaculture suitability areas* – Forecasts indicate that national demand for fish products in Angola will continue to increase over the next decades, driven predominately by rising populations and urbanization [70]. This justifies the need to identify and map aquaculture resources, for proper management and future planning. These resources include lagoons, rivers, reservoirs, dams, ponds, canals, irrigation canals, swamps and small, seasonal, inland floodplains, as they hold the future of small holder aquaculture development in the rural economies. The objective is to identify and map the areas that have the potential for the development of aquaculture in the AFAP-2 selected Provinces. The activity will build on the work conducted by the National Directorate of Aquaculture which conducted some preliminary studies to identify and map aquaculture potential areas. The project will assess where such reports can be updated or if there will be need for new assessments. The PMU will competitively contract a TA (Aquaculture Expert) to undertake the aquaculture suitability mapping

in accordance with the ToRs included in the PIM;

- *Supporting the adoption of sustainable small-scale aquaculture technologies* – This intervention will put particular focus on community-based fish pond systems, cage aquaculture pilots in suitable lagoons, and selected aspects of integrated aquaculture-agriculture interventions. The project will support the construction of 6,000 fish ponds of 500 m² each (about 1,200 fish ponds per Province), distributed among level 1 and 2 farmers, participating in community-based producer groups. Each household will receive one pond. This initiative hinges on the success of a community mobilization campaign, which will have effectively organized beneficiaries into aquaculture producer groups. Preference will be accorded to community members affiliated with organized groups, showcasing commitment to aquaculture and/or agriculture. AFAP had made considerable achievements regarding community ponds, which are owned and operated by group members for nutrition purposes ('Nutripond'). A 'Nutripond' incorporates polyculture of diverse fish species in a special pond primarily to provide food and enhance nutrition for the whole community^[71]. AFAP-2 will assess various options for pond construction and employ the method that is cost-effective, efficient and which expands opportunities, especially for the youth. The Project will support one 'Nutripond' in each community producer group but communities may establish additional nutriponds with their resources.
79. To increase productivity of aquaculture ponds, the Project will pilot solar-driven pond aerators to increase oxygen circulation in water, improve water quality, and nutrient distribution. The aerators will be piloted in the 'Nutriponds' or in other suitable community ponds to demonstrate their effectiveness to farmer groups. The project will link individual farmers interested to adopt the solar-driven aerators with micro-financing agencies.
80. In addition, the Project will support cage aquaculture in selected lagoons, involving a total of 250 cages (50 cages per Province). This is in response to the huge potential that exists for enhancing fish production through cage aquaculture in the lagoons to enhance nutrition and incomes for local communities. Cage aquaculture strategy minimizes the need for constructing new ponds, thereby making efficient use of natural water resources. The number of cages per lagoon will be guided by the "carrying capacity", determined by fish stock assessment, water quality and related considerations. Despite the potential, the project has taken a precautionary approach by limiting the number of cages to 250, which could be reassessed at MTR based on the above factors and the capacity of Government to monitor the effects of aquaculture on water quality. The intervention will support provision of fish cages and key inputs (fish feed and seed) sufficient to sustain two complete production cycles for selected community groups. Subsequently, farmers should be capable of self-financing their operations through linkages to micro-financing arrangements described under subcomponent 2.1. The Project will introduce simple innovations, including insect trapper solar lights in selected lagoons as an innovative supplementary fish feeding strategy to minimize costs, and maximize returns. The PMU, in collaboration with Provincial and Municipality authorities, will identify suitable lagoons for the initiation of cage aquaculture intervention. The PMU will competitively procure and deliver the required cages to the designated lagoons. The PIM outlines the cage specifications, recommends factors to consider during identification of suitable cage site locations and management strategies.
81. Agriculture is a popular economic activity in the Project area and, where feasible, the Project will facilitate Integrated Aquaculture-Agriculture (IAA) as resource-use efficient food system to create resilient communities with improved socio-economic and environmental outcomes. IAA provides benefits from increased food production, income generation, and reduced vulnerability to climate fluctuations. IAA options may include the integration of fish and vegetable exemplified through the establishment of kitchen gardens, where nutrient-rich water from the fish ponds will be utilized for vegetable irrigation, fostering enhanced nutrient cycling. As a minimum, it is expected that each group will establish one conical vegetable garden around every 'Nutripond' as a demonstration to the farmers to adopt at their respective pond areas. The specifications of conical garden are outlined in the PIM.
82. Other IAA options that may be adopted include fish-duck integration, wherein ducks will contribute to pond fertilization through their manure while foraging in the ponds. This symbiotic approach aims at optimising resource utilization and elevate overall pond productivity. Considerations for adoption of fish-duck integration must include the farmers' capacity to properly raise ducks, including veterinary care, feeding and constructing duck houses. Subject to meeting these conditions, the Project will provide community producer groups with the inputs, following the procedures specified in the PIM.
83. To further improve productivity, the Project will promote adoption of 'Carbonized Pond' Technology (CPT), which involves utilizing cassava peels as a carbon source in fish ponds, to improve pond nutrient content. The PMU will introduce CPT in every 'Nutripond,' for community learning purposes, with the expectation that each farmer will implement it in their respective ponds. The preparation and introduction of CPT will adhere to the guidelines outlined in the PIM.
- *Strengthened extension services and farmers' capacity building* – Under AFAP, extension services were flagged as a key weaknesses affecting sustainability of the Project's results. Currently, IPA does not have a functional inland fisheries extension services system, and the Project will dedicate significant attention to put this in place (discussed under Subcomponent 3.1). Enhancement of skills among farmers and extension staff within established aquaculture production systems is a key focus of this Project. Technical training will be provided to both farmers and extension staff, covering various aspects of small-scale aquaculture technology and management practices integrating climate risk management. IPA will be responsible for the training and capacity building initiatives. The training module will encompass practical demonstrations and employ peer-to-peer learning strategies. Selected farms will serve as models for Aquaculture Field Schools (AFS), as detailed in the PIM. In addition, the project will facilitate specialized trainings and exposure visits for aquaculture extension service providers. These visits will include exchange learning visits to successful aquaculture enterprises, both domestically and internationally, allowing for benchmarking in sustainable small-scale aquaculture production and the establishment of valuable value chain linkages. The PMU, in collaboration with Provincial authorities, will identify and nominate three suitable extension staff per Province for specialized training in the realm of small-scale aquaculture production and management practices.
 - *Enhanced supply of aquaculture inputs for increased productivity* – The prosperity of aquaculture production hinges on sustainable strategies for the production and cost-effective supply of the key inputs – feeds and fingerlings. Currently, fish feed constitutes over 70% of the total production costs in most aquaculture ventures. The Project aims at bolstering the

rehabilitation of government-owned hatcheries, such as Kamibafu in Malanje Province and Masangano in Cuanza Norte, to generate ample quantities of quality feeds and fingerlings. The PMU, in consultation with IPA and Provincial authorities, will contract suitable service providers to rehabilitate the government-owned hatcheries to acceptable standards and capacity to supply aquaculture inputs. In addition, there are private sector entities actively involved in the production of aquaculture inputs in Luanda, Bie, Uige, and Bengo Provinces. These companies will play a key role in producing and distributing aquaculture inputs to benefit Project participants. The Project will incentivize private players by facilitating linkages to micro-finance institutions for credit, aggregating feed and fingerling markets, reinforcing public access roads, and offering training and capacity building for private producers to improve feed and seed quality standards. The distribution channels for aquaculture inputs to the Project beneficiaries will follow the enterprise development network outlined in Subcomponent 2.

84. **Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development** – This Component will contribute to the achievement of *Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurs and infrastructure providing services*. It aims at supporting Component 1 with the necessary infrastructure, market linkages and entrepreneurial capacities to deliver quality fisheries and aquaculture inputs and products linking the source, producer, intermediaries and the consumer. The component will play a key facilitative and intermediary role both on the inputs and output markets. It is built around strengthening of linkages and networks among value chain actors. Interventions include identification of viable investments and support to selected Producer-Public-Private-Partnerships (4Ps); development of essential value chain infrastructure (water supply systems for aquaculture, landing sites at lagoons, last-mile roads, first-point of sale input/output markets, sanitation facilities, intermediate markets, cold storage and processing facilities etc.); strengthening market linkages and promoting fisheries and aquaculture linked enterprises; business development services, especially to youth-operated enterprises along the value chain and financial linkages for the sustainable development of the sector. Focus will be placed on women, youth, the disabled and other vulnerable groups. The component consists of two Subcomponents.
85. **Subcomponent 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries** – This subcomponent will seek to establish and/or improve the efficiency and effectiveness of income-generating activities along the aquaculture and inland fisheries value chains while also making them climate resilient. It contributes to Output 2.1: *Viable Enterprises for Improved Market Access Established*. Accordingly, it will focus on strengthening inland and aquaculture inputs and outputs market linkages, enterprises, and financial services and ensuring they are climate resilient. Specifically, it will: a) facilitate sustainable delivery of fisheries and aquaculture inputs to beneficiaries; b) support the development of business orientation for the farmers/fisherfolk and producer groups (cooperatives) for sustainable and climate resilient production to improve their commercialization and market participation; and c) improve value addition and market linkages through commercialization of the core activities of the inland fisheries and aquaculture value chain actors in the selected provinces to make them financially viable and bankable for the sustainable development of the sector. It will support interventions intended at broadening and deepening the fisheries and aquaculture value chains in Angola, with a series of strategic investments. In that regard, the use of Public-Private-Producer-Partnerships (4Ps) will, especially, be promoted to operationalize the key public infrastructures rehabilitated/developed by the project as well as private anchor-producers to support access for inputs and markets for smallholder producers.
86. For sustainability, the sub-component subsumes private sector-led approaches in delivery of the interventions. In this regard therefore, coordination and dialogue with individual private sector actors will be essential throughout the duration of the AFAP II. Potential partnerships will be established with feed manufacturers, hatcheries, importers, traders, large producers, intermediaries, distributors, and financial institutions. Given this diversity, the project will need to develop a private sector engagement strategy and tailor its approach to private sector engagement to specific contexts and private-sector actors. The strategy will guide the project's efforts in leveraging and engaging private sector in development of the aquaculture and inland fisheries subsectors through partnerships and facilitating sustainable and inclusive business activities as well as climate resilience along the value chain. In addition, given that the aquaculture and inland fisheries subsector is not well developed, project resources could also be allocated to "private sector development" to support development of strategies and policies for developing and strengthening the private sector and market systems. A balance between "private sector engagement" and "private sector development" will be necessary to bring about AFAP II desired outcomes.
87. Specifically, the Subcomponent aims to identify the main areas of interventions along the aquaculture and inland fisheries value chains and to promote understanding of key stakeholders such as producer groups, private anchor producers, input manufacturers and suppliers, fish products buyers and off-takers, TA providers and financial institutions (FIs). In addition, it will promote the development of climate resilient enterprises along the aquaculture and inland fisheries value chains through the development of business plan proposals by the private sector.
88. The Project will seek to identify the opportunities as well as the weak and missing links in the aquaculture and inland fisheries value chains. For example, aggregation of demand for inputs (fingerlings and feeds) and last-mile distribution, production planning/scheduling at the farm level, output aggregation and cold storage facilities, basic processing and value addition, market access and the creation of robust PPPPs that would address the challenges. Although a fish and aquaculture market assessment was conducted under AFAP [72] (which informed this design), there are still information gaps especially for the new provinces. Thus, AFAP-2 will conduct detailed value chain analyses of aquaculture and inland fisheries covering all the target provinces. The analyses will identify, among others, existing infrastructure in the public and private sector with opportunities for enhancing performance and efficiency by using PPPPs. The analyses will also include climate risk analysis along the value chain. While the precise nature, mix and scope of investments will be determined based on information collected during the detailed value chain analysis, information presently available indicates the following gaps and preliminary areas of intervention:
- Existence of public facilities for instance Masangano and Kamibafu with potential of producing the required inputs, especially fingerlings if appropriate management frameworks are put in place. The project will seek to enhance performance and efficiency of these public facilities by using competitive PPPPs agreements.
 - Inadequate last mile distribution network for inputs (fingerlings and feeds) to production areas. The project will support the development of enterprises aimed at enhancing last mile distribution of inputs to producer groups.

- Existence of large private owned aquaculture farms. These farms have better access to both input and output markets, in most cases operating their own hatcheries. These farms present opportunity for the project to leverage on their experience as anchor producers to support the smallholders access technical assistance, inputs, and output markets.
- Limited aggregation of produce by the farmers resulting into low bargaining power and constrained market access. The project will support establishment of aggregation centres to improve market access as well as reduce post harvest losses.
- Limited value addition and processing. The project will therefore enhance investments for establishment of enterprises for value addition and processing and to operationalize existing value addition infrastructure through improved management and the creation of linkages between producers and final markets.
- Business development capacity gaps at the producer groups (Cooperatives) and opportunities to leverage on technical assistance initiatives promoted by the GoA through the National Institute for Support to Micro, Small and Medium Enterprises (INAPEM) and Directorate of Rural Commerce and Development (DCRD).
- Limited access to finance by actors given the unstructured nature of the value chain.

89. To achieve the intended subcomponent output, the following activities are planned:

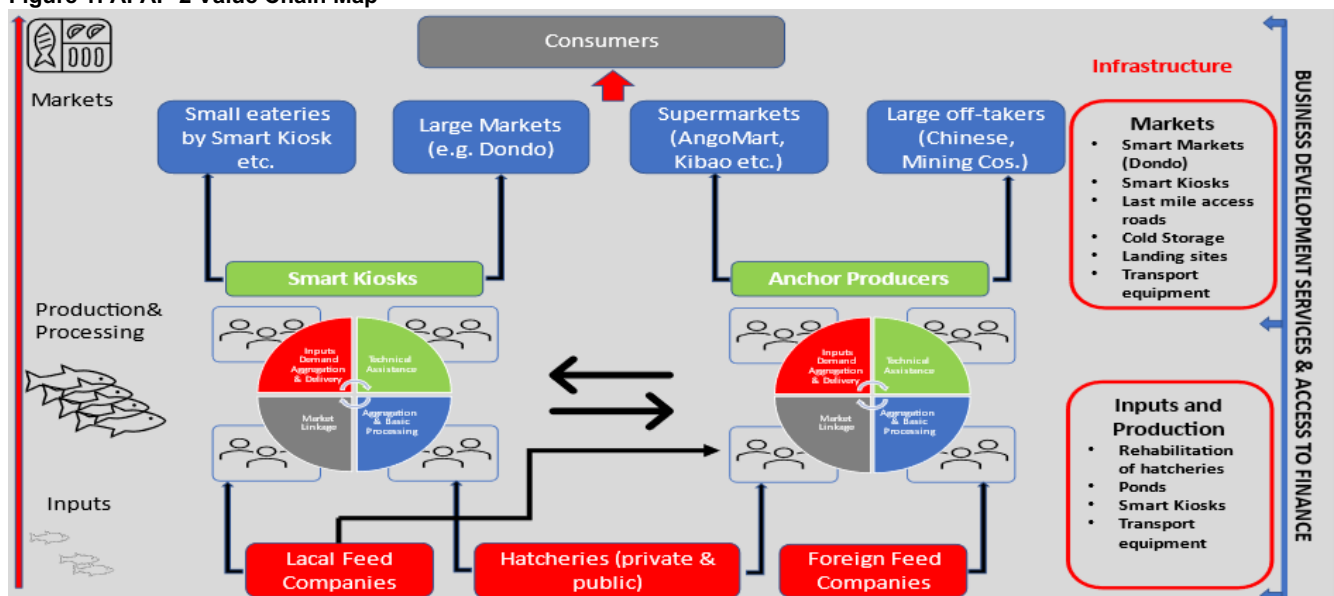
- *Establishment of PPPP agreements to operationalize the public aquaculture infrastructures*– To enhance production and supply of fingerlings to producer groups, the project will establish PPPP agreements through competitive process to operationalize two aquaculture facilities at Masangano and Kamibafu. Current assessment indicates that Masangano and Kamibafu have the potential to produce enough fingerlings to meet demand. Nevertheless, the facilities are not operating at full potential largely due to management issues. The project will establish two PPPP agreements through a competitive process to manage and operate these facilities for sustainable supply of fingerlings to producer groups. Successful private companies will be expected to prepare robust business plans as part of their proposals indicating expected production capacity and required capital. Based on the business plans, the project funds may be utilized for refurbishment including climate proofing and upgrading these facilities focusing on “public goods” such as access roads and immovable equipment, while the investors will be expected to cater for working capital and movable equipment. In addition, AFAP-2 will establish a PPP agreement for the management and operationalization of two smart markets, on a pilot basis, to inform and stimulate further private sector investments in additional smart markets. To support the implementation of this activity, the Project will procure Technical Assistance. If needed, the Project will facilitate the investors through letter of comfort from the Government, to access commercial finance.
- *Establishment of PPPP agreements with fish feed manufactures to produce and supply quality feeds to producers* – One of the key constraints in the aquaculture value chain in Angola is lack of access to quality inputs (feeds and fingerlings) by the farmers. There are a few large private feeds manufactures, for instance Supermarca in Luanda. These firms have the capacity to produce sufficient feed but are currently operating at sub-optimal capacity largely due to poor linkages with farmers. Furthermore, these firms lack distribution networks in the provinces and most farmers have to source feed from the capital, Luanda. The project will establish competitive PPPP agreements with at least two large fish manufacture to produce and supply quality feeds to the producer groups. The PPPP agreements will stipulate the guaranteed aggregated demand of fish feeds from the project beneficiaries as incentive to the feed manufacturers. On the other hand, the manufactures will commit to timely supply of quality feeds as per the agreement. Where necessary, the project will support technical assistance in formulation of the feeds.
- *Development of enterprises through competitive business plans to operate Smart Fish Kiosks* –The distributive capacity for quality fisheries and aquaculture inputs (feeds and fingerlings) to farmers remains a critical weak point, hampering farmers’ access to these vital inputs. To address this, the project will facilitate sustainable delivery of aquaculture and inland fisheries inputs to beneficiaries through a private sector led approach for sustainability. This will be done by development of enterprises aimed at enhancing last mile distribution of inputs to producer groups using the “Smart Fish Kiosks” model. Each Smart Fish Kiosk will be operated by a five-member youth group who will sign contracts with feed manufactures and hatcheries. The project in collaboration with INAPEM and DCRD will identify the youth groups through a competitive business plan process. To jump-start operations of the smart kiosks, the project will support the successful youth groups with matching grants for working capital on a competitive basis, as outlined in their business plans. The project will develop a detailed grants manual outlining how the grants will be implemented. Successful youth groups will also be provided with Business Development Services (BDS), mentorship and business incubation leveraging on the training programs offered by INAPEM and DCRD. The BDS will be designed to be comprehensive and tailored to the unique needs of the youth entrepreneurs, helping them to overcome the specific challenges they face and to leverage their potential for economic and social impact. Some of the areas that may be covered in the BDS are business management including planning and financial management; mentorship and networking; access to finance; marketing and access to markets and legal and regulatory guidance. While principally the Smart Fish Kiosks will act as last mile input distribution points, the full range of services/enterprises to be operated include: a) Input dealing - aggregation of demand from farmer groups, stocking and distribution to farmer groups; b) technical assistance to producer groups on basic agribusiness practices such as record keeping, production planning/scheduling and stocking and correct application of feeds; c) buy back arrangements from producer groups, aggregation and cold storage; d) basic processing and value addition (filleting, drying, smoking etc.) and; e) marketing. It is expected that eighty-five (85) Smart Fish Kiosks will be built and allocated to the youth groups through a lease agreement to be administered by DCRD. The project will also provide input subsidies to the farmer groups using this network. This is expected to support business growth and development of the Smart Fish Kiosks by guaranteeing sales during the subsidy period. It is expected that the 17,250 aquaculture farmers and fisherfolks will be supported with input subsidy.
- *Identification and contracting of private Anchor Producers linked to Smart Fish Kiosks and supporting smallholders’ access to inputs, markets, and advisory services* – to compliment the Smart Fish Kiosks, the project will also identify and contract private “Anchor Producers” to support the farmers access to inputs and output markets. Current assessment indicates the existence of several large private aquaculture producers in the project areas. These large producers have better access to inputs due to economies of scale, with many of them operating hatcheries of capacities in excess of their requirements. Similarly, they also have better access to structured markets (supermarkets and large off-takers such as Chinese firms and mining companies), which they are unable to meet. The project will contract twenty-five (25), five per province, of these Anchor Producers. The Anchor Producers are expected to serve the producer groups directly and/or through the network of Smart Fish Kiosks. Like

the smart kiosks, the Anchor Producers will aggregate demand from farmer groups, stock and distribute the required inputs. They will also sign buy-back contracts with producers for market linkage. To incentivize these private actors, the project will provide technical assistance on a need basis in addition to facilitating their access to commercial finance.

- *Provision of Business Development Services to selected actors/enterprises* – to support the growth of business enterprises along the aquaculture and fisheries value chains for sustainable development of the subsector, the project will offer business development services to various actors (producer groups, Smart Fish Kiosk operators, Anchor Producers, fish traders etc.). For effectiveness, efficiency, and sustainability, the BDS will be provided in collaboration with INAPEM and DCRD. While the exact nature of the BDS to be provided will depend on the needs assessment of the various actors, the following areas are probable: (i) Financial literacy, record keeping and business orientation for producer groups for sustainable production to improve commercialization and market participation; and (ii) entrepreneurship, support for business registration and business plan development for youth groups and fish traders.
- *Supporting access to finance for value chain actors through existing government programmes and commercial financial service providers* – Access to finance by the value chain actors is key for the development of the aquaculture and inland fisheries subsector in Angola. Currently, there is limited access to finance by actors despite several initiatives promoted by the GoA through commercial banks and the Development Bank of Angola (DBA), largely due to the unstructured nature of the aquaculture and inland fisheries value chains. It is expected that the project interventions will go a long way in supporting structuring of the aquaculture and inland fisheries value chains by establishing viable enterprises and thereby de-risking the subsector to make it attractive to the financial service providers. In this regard, the project in collaboration with INAPEM and DCRD, will, from the onset, carry out scoping and sign MoUs with suitable financial institutions aimed at improving access to finance for its beneficiaries and value chain actors. The objective of the MoUs would be to mobilize the various project beneficiaries/value chain actors to benefit from the access to finance initiatives promoted by the GoA through the financial institutions. Specifically, through the BDS on the demand side, the project will improve the bankability of its beneficiaries and other value chain actors and generate a pipeline of possible clients for the FIs. On the other hand, on the supply side, the FIs will be expected to develop financial products matching the requirements of the project beneficiaries/ value chain actors. In addition, the Project will avail the detailed value chain studies/assessments to the financial institutions. The value chains studies will identify financing opportunities/gaps together with the associated risks along the chain to enable financial institutions make informed lending decisions and facilitate FIs investments in the sub-sector. Component 2 beneficiaries fall under Category 3 (C.3) target group for local actors in the form of micro, small and medium-sized enterprises, formal or informal, already active in local supply chains, performing functions such as supply of inputs (fingerlings and feeds, trainers, processors, aggregators, marketing of fishery and aquaculture products, etc.).

90. The proposed value chain map is depicted in Figure 1 below.

Figure 1: AFAP-2 Value Chain Map



91. **Subcomponent 2.2: Enhancing Market Access and Infrastructure Establishment**– This will focus on market infrastructure to connect businesses, improve market access, and create a conducive environment for economic growth. The success of Angola’s inland fisheries and aquaculture sector not only hinges on production capabilities but also relies on the establishment of robust market access infrastructure. The subcomponent contributes to *Output 2.2: Key Infrastructure for Improved Production and Market Access Established*. Where relevant, some of the foreseen interventions under this subcomponent will seek to employ the 4Ps approach that would ensure mutual benefits for all parties. The following activities are planned:

- *Market Access Enhancement through Last-Mile Roads* – To overcome challenges in transportation and connectivity, the Project will undertake the construction and upgrading of last-mile all-weather roads. These roads will connect aquaculture farms and lagoon landing beaches/sites to trunk roads and to markets, ensuring efficient and reliable transportation of fish products. The implementation will involve gravelling and grading initiatives, covering a total of 100 km per province, and totalling 500 km across Project areas. Climate resilience measures, such as adding camber and drainage (including culverts), will be incorporated to enhance road durability. This particular focus on climate change aspects will ensure that roads that cut off production sites from accessing markets (such as flood prone and/or eroded roads) are made all-weather passable;

- *First Landing Point of Sale Facilities for Post-Harvest Efficiency* – A total of twenty-five (25) Fish Landing Point of Sale facilities will be established at selected lagoons to reduce post-harvest losses and enhance the profitability of small-scale fishers, including women and youth in the value chain. These sites are to be built by competitively engaging private sector and will be equipped with necessary facilities, including sheds, running water, sanitation facilities (VIP - Ventilation Improved Pit - latrine), multi-functional areas, and micro-processing facilities. The integration of water and renewable energy (solar and biogas)/electricity access will ensure sustainability and reduce the environmental impact of the facilities. In addition, this would be the first point of fish waste management and collection points using the 'micro-mobility'. This waste will be used upstream in the value chain to produce biogas, and manure. For the inland water bodies in Angola challenged by invasive water hyacinth, this weed will be collected and processed for the generation of biogas. The management, maintenance and operation of the Fish Landing Point of Sale facilities will be by close collaboration of the groups or cooperative and local/municipal government on an agreed user fee structure.
 - *Smart Fish Kiosks and Smart Markets Integration* – The Project will introduce Smart Fish Kiosks and smart markets as intelligent market outlets equipped with renewable energy and sustainable infrastructure.
92. **Smart Fish Kiosks** – These will provide temperature-controlled/cold-storage infrastructures to reduce fish perishability. The facilities will effectively use Solar Energy to deliver sustainable, affordable and reliable energy access to fish kiosks whilst also reducing food-miles through on-site fish storage. This will be achieved by designing/building Smart Fish Kiosks with: a) roof-top solar panels that cater to various energy needs; b) cold storage facility; c) solar hot water access; d) retailing and display areas; e) produce storage/shelving; f) security of kiosk (containerised storage); and g) shading. The Smart Fish Kiosks are expected to be built in two models: a) locally fabricated; and b) re-fabrication of 40-foot shipping containers. Each of the two models will be equipped with the ability to house the above capabilities. In addition, the Smart Fish Kiosks will be linked to micro-mobility solutions of (wheelbarrows, two-wheelers (motorcycles) and three-wheelers (tricycles) for linking the farm2fork value chain and the delivery of feeds and other inputs into the ponds, rivers farmers and lagoons
93. **Smart Markets** – These are intelligent market-outlets utilising renewable energy (RE), sustainable infrastructure, and energy management technology to deliver tailored place-based circular economies and reduce energy cost/emission in market-outlets. The proposed market-outlets will be energy self-sufficient by designing/building the market-outlets with roof-top solar panels, including bio-digesters (with food waste depository) and other locally accessible RE solutions (including advanced storage technology), catering to various energy needs. In times of low energy utilisation in the market, the smart market would serve offsite energy demands by availing the excess energy generated. This is targeted at achieving scalable sustainable energy, reduce food wastage in the agricultural value chain and provide equality, diversity and social inclusion.
94. These outlets, serving trading centres, will contribute to reducing post-harvest losses (PHLs), energy access, infrastructure, Water, Sanitation and Hygiene (WASH), waste management, trading activities and adding value to fish products. Integrated with energy-efficient cold/dry chain and micro-processing facilities, Smart Fish Kiosks and markets will enhance market access and quality preservation in rural areas.
95. To create a conducive environment for economic growth, the Project will construct two smart markets in Dondo and Bengo, fully equipped with energy-efficient cold chain and processing facilities. These markets, including marketplace sanitation facilities, and intermediate markets, will serve as central hubs for trading activities. Cold chain aggregation centres and other forms of value addition (filleting, processing, packaging, value added products (frying, fish balls, cakes, sausages, drying, marinating, seasoning, freezing, storing, branding and marketing) will also be established as part of the smart markets to ensure quality preservation and improved marketing of fish products.
96. In addition, the Smart Fish Kiosks and markets will serve as input aggregation points providing the much-needed linkages for accessing inputs (feeds, fingerlings, nets, etc.) and market information to the fish farmers, fishers, traders, etc. As well as strengthen the anchor buyers' potentials that can be offered by the private sectors and provide the first customers or trading opportunities for the aquaculture and inland fisheries sector. Through the project, it is expected that eighty-five (85) Smart Fish Kiosks and two (2) smart markets will be delivered. The markets will be constructed at Dondo (Cuanza Norte) which was previously identified in AFAP and Bengo.
- *Water Supply Canal Systems for Aquaculture* – Ensuring a reliable water supply is crucial for fisheries and aquaculture activities. The Project will support construction of simple water supply canal systems operated by gravity to improve consistency and control of water for aquaculture in fishponds. This intervention is a climate change adaptation measure, aimed at enhancing water management, promoting sustainable aquaculture practices and supporting communities engaged in fish farming. The water systems will be constructed by competitively engaged service providers, communities and managed by the Ministry of Energy and Water and Provincial Governments. The intervention would be managed and maintained by fishing community groups for productive/economic use and to improve sanitation and fish quality.
 - *Development of Hatcheries and Feed Production Facilities* – The establishment of hatcheries and feed production facilities through private sector partnerships will be a key focus. This intervention aims at strengthening the production of inputs by refurbishing and strengthening existing large-scale fish feed producers and hatcheries. 4Ps will be encouraged to participate in this link of the value chain, ensuring the sustainable production of quality inputs for the aquaculture sector. The Project will not finance large private sector hatcheries or seed producers but will, as necessary, link these private sector players to potential micro-finance institutions for credit.
97. To ensure adequate supply of key aquaculture inputs, two government owned facilities in the Project area will be rehabilitated/upgraded by the Project: a) completion of the Kamibafu aquaculture facility; this process was initiated by AFAP. The facility will be enabled to operate a hatchery, fish feed production and serve as a training centre. For effectiveness and sustainability, the facility will operate as a Public-Private Partnership (PPP) model; and b) rehabilitation/upgrading the aquaculture facility at Masangano, incorporating hatchery, grow-out ponds and feed production unit. The objective will be to upgrade/rehabilitate the infrastructure to enhance the production capacity and improve operational efficiency of the facility under a PPP model.

- *Implementation of Waste Management Solutions* – In addition to the smart market, the Project will introduce waste management solutions at the Dondo and Bengo smart markets. This will be managed by the operators (and with the operational structure) of the smart markets. Introducing waste management solutions will be crucial for creating circular economies within the value chain. Smart Fish Kiosks and smart markets will incorporate green, blue, and grey bin-waste management techniques to collect organic, inorganic, and non-biodegradable waste. The collected organic waste (inclusive of fish waste), together with the water hyacinth, will be mixed with the Black Soldier Flies (BSF) for fish feed manufacturing and biogas generation. To promote sustainability, the smart markets and other private sector business interventions will serve as centralization and collection points for waste management. This holistic approach of integrating circular economies into market infrastructure ensures inclusive, efficient, and sustainable food systems, contributing to a cleaner environment and improved income for residents. This process will contribute to the sustainable feed production and reducing the negative impact of AFAP-2 interventions on the environment. It should be noted that non-biodegradable waste will also be collected and linked to the waste recycling plants for proper processing and management;
98. Also, the smart market will be integrated with micro-mobility solutions (wheelbarrows, two-wheelers (motorcycles) and three-wheelers (tricycles) for the transportation of fingerlings, feeds, wastes and produce. This is to promote and sustain further market linkages and circular economy in the fish value chain. This would be done in close collaboration with private sector and government.
99. This subcomponent's success will rely on collaborative efforts involving public sector interventions, private sector engagement, and enterprise development initiatives. Through strategic interventions and the establishment/renovation of critical market access infrastructure, the subcomponent aims to create an environment where Angola's fisheries and aquaculture sector can significantly contribute to economic development, food security, and poverty reduction.
100. **Component 3: Institutional Strengthening, Policy Support and Project Management** – The objective of the component is to enhance the institutional capacity of community-based/farmer organisations and public entities providing services to target beneficiaries in the Project areas. It also seeks to facilitate the pathways for the Project's effective implementation and inclusive functioning of the inland fisheries sector, from production/capture to consumption. It comprises two subcomponents.
101. **Subcomponent 3.1: Institutional Strengthening and Policy Support** – Interventions under this subcomponent will contribute to the achievement of *Outcome 3: Strengthened institutions and policies for a sustainable and inclusive inland fisheries sector*. The subcomponent has a dual focus: institutional strengthening and policy support.
102. **Institutional Strengthening** – The objective of this intervention is to augment the capacity of the institutions (public and private sector/community-based organisations) that will be responsible for overseeing and/or implementing the different Project activities. The appropriate TA will be recruited to address the identified institutional capacity gaps to ensure that they have the capabilities to execute the Project as per the design. Activities under this intervention will include:
- *Build the PMU capacity for effective implementation* – The Project will support the PMU staff to enhance their coordination abilities, financial management, procurement, planning, monitoring and evaluation, knowledge management. This will be done as soon as the PMU staff are recruited. These trainings will seek to ensure compliance with the requirements of the different financing institutions. In addition, particular steps will be taken to spread awareness about the IFAD policies on fraud and corruption; this would be done for all stakeholders;
 - *Build the capacity of IPA to coordinate and integrate the provision of inland fisheries and aquaculture extension services* – The project will aim to address the existing gap in the provision of effective extension services in the inland fisheries sub-sector (aquaculture and capture fisheries). IPA will need to identify personnel that will be trained to support implementation during and after the project period;
 - *Provision of the logistic support for effective service delivery* – Logistical limitations at the provincial and municipality levels complicates the ability to reach the target beneficiaries in the communities. The Project will provide motorcycles for use by the relevant provincial and municipality staff service delivery to the target beneficiaries;
 - *Improve the capacity for coherent data collection* – This will involve: a) M&E workshop/training with AFAP-2 implementing partners to validate the reporting formats, agree on reporting timelines to ensure harmonization of all data collection methods; b) Training to Field Extension Officers on data collection of output indicators, facilitated by the PMU and supervised by the M&E Specialist. The training will involve active participation of beneficiaries at the grassroots level. This training aims to enhance beneficiary capacity, foster accurate data collection practices, and minimize the risk of data manipulation; c) Provision of IT equipment (e.g. computers, etc.) and development of a Management Information System (MIS) for the MINPERMAR and eventual training to all the users/stakeholders of the MIS – in collaboration with the national institute of statistics;
 - *Build capacity for identifying and addressing gender, youth and nutrition issues* – In order to effectively achieve this objective, the PMU will be equipped with adequate knowledge and skills to conduct relevant nutrition analyses, identify entry points along the food value chains, design targeted interventions for the most nutritionally vulnerable and strengthen integration of gender and youth from a food system perspective. This will require preparation of guidelines and provision of training on nutrition/gender/youth sensitive approaches and have them institutionalised in all implementing agencies. During the first year of implementation, the Project, in consultation with IFAD, will recruit the appropriate Technical Assistance/Consultancy to prepare the AFAP-2 gender, youth and nutrition mainstreaming strategies and the associated action plans. Service providers would then be recruited to provide the needed training although some of the trainings will be provided directly by IFAD;
 - *Training to raise awareness about climate change, its impacts on fisheries and aquaculture, and the importance of building climate change resilience in the sector* – The Project will build capacity to access and utilize climate information and forecasts for decision-making to inform aquaculture planning and management – Such data would be useful severally, including climate-resilient pond management techniques, water conservation and efficient use, pond construction and design to withstand climate-related challenges;
 - Improve the capacity in identifying and addressing factors constraining effective functioning of community-based organisations.

103. While some capacity gaps for some institutions were identified during the design process, the same cannot be said for others. Accordingly, the AFAP-2 will undertake an institutional capacity gap assessment through intensive engagement of stakeholders, formulate a capacity development plan, and support implementation of that development plan. The primary aim of this strategic intervention is to bolster the capabilities of both public and private sector entities, as well as community-based organizations, tasked with the governance and execution of various project initiatives. We recognize the necessity of conducting a comprehensive institutional gap analysis within the first year of implementation. This will inform the project design and mitigate the risks associated with executing complex activities without a foundational understanding of institutional capacities. To address the identified gaps, we will engage in the competitive recruitment of specialized Technical Assistance (TA). This approach ensures that the selected TA possesses the requisite expertise to implement the project in accordance with its design. The activities encompassed by this intervention will be meticulously planned to align with the enhanced institutional framework, thereby facilitating a robust and effective project rollout.
104. **Policy Engagement Support** – The focus of this intervention will be to facilitate the development, review and update of policies and strategies in areas identified as critical for the effective and sustainable development of Angola’s inland fisheries. Some of the areas identified as being key in the policy arena include:
- Support to IPA for the formulation of inland fisheries/aquaculture extension strategy/system – The country’s inland extension service provision is inadequate. AFAP-2 will support the relevant institutions to develop an inland fisheries extension strategy. Efforts will be made to prioritise this intervention so that the Project can also support implementation of the developed strategy; this will contribute to sustaining AFAP-2’s successfully interventions;
 - Development and adoption of a community-based fisheries production and management policy. This would provide a legal basis for the development and functioning of structures such as CCPs, LMPs, etc.;
 - Establishment of policy guidelines aimed at standardizing fish feed quality. With the ongoing expansion of the aquaculture industry in Angola, the guidelines will be crucial to ensure that there is a uniform national quality standard of product and processes applicable to both locally produced and imported feed, which should be benchmarked to international standards; and
 - Establishment and promotion of policy instruments aimed at encouraging private sector investments in fisheries and aquaculture development. Such instruments could include: a) attractive financial incentives for the interested large private sector hatcheries or seed producers. This could involve facilitating the stakeholders to acquire Letters of Comfort to access credit facilities; b) facilitate the establishment of PPPPs thereby leveraging the strengths of both sectors; and c) encourage the establishment of appropriate financial mechanisms to enhance access to credit and investment capital for small and medium-sized enterprises (SMEs) in the fisheries and aquaculture sector.
105. It should be pointed out that AFAP-2 will seek to collaborate with the FAO in the area of fisheries sector policy design and review. FAO has, traditionally, been GoA’s key partner issues, among other things, related to agriculture and fisheries policies. Other potential partners for collaboration on specific policy dialogue priorities may be identified during the course of implementation.
106. **Subcomponent 3.2: Project Management** – This subcomponent will focus on putting process and procedures in place to ensure effectiveness in overall AFAP-2 management, planning and implementation, financial management and control, procurement, monitoring and evaluation, knowledge management, progress reporting, contracting and supervision of different service providers, etc. It will also ensure liaison and linkage with all other relevant projects/programmes being implemented in the country that seek to address similar or related constraints; this would be aimed at taking advantage of existent synergies and avoiding duplications. This will entail the establishment of a Project Management Unit (PMU) at the national level with adequate staffing as well as the resources for management operations. Coordination structures will also be established at the provincial level. Details related to Project management are contained in Section K (a): Project Management and Coordination of this report.

E. Theory of Change

107. AFAP-2 seeks to address several key challenges within Angola's inland fisheries sub-sector to address the increasing consumption of fish and reduce imports. These include: a) limited literacy and awareness of nutrition and climate change-related issues among the fishing communities; b) weak or lack of sustainable lagoon management systems; c) limited community access to inland fisheries for both nutrition and income generation; d) lack of technical skills in aquaculture production among the target communities; e) limited access to technology, inputs, advisory services and support; f) scarcity of technical information regarding aquaculture suitability in the target areas; g) weak or lack of input and output market linkages; h) scarcity of aquaculture-linked enterprises and limited access to finance; i) market asymmetries; j) seasonal concerns; k) general system inefficiency; l) poor access to financial services and weak private sector; and m) lack of widespread business vision among all involved actors. The absence of fish production infrastructure, including fishponds and fish feed, as well as a lack of fish landing sites, cold storage, and processing facilities, further impedes the growth and efficiency of the inland fisheries sub-sector. In addition, support institutions and service providers face limitations in knowledge and technical capacity, including policy constraints that hamper effective intervention and support efforts.
108. AFAP-2 will address these constraints through a holistic approach. This will involve focusing on fisheries and conservation of lagoon ecosystems, aquaculture production, market enterprise, institutional capacity strengthening and policy engagement support. To achieve this, AFAP-2 will undertake a series of activities, including establishing and/or strengthening Community Councils of Fishers (CCPs), instituting surveillance and monitoring systems, providing training on sustainable fisheries and ecosystem management, promoting climate-resilient aquaculture practices, extension support and enhancing entrepreneurial and business management skills. AFAP-2 through a holistic and participative approach that promotes economic empowerment, equal voice, and balanced workload for women, youth and people leaving with disability.
109. It is expected that the proposed activities will contribute to the following outputs: a) establishment of effective inland fisheries management systems; b) development of resilient and business-oriented aquaculture production systems; c) establishment of inland fisheries and aquaculture extension system; d) development of aquaculture and inland fisheries market-linked enterprises; e) establishment of market and value addition infrastructure; and f) provision of support to the relevant institutional and policy networks.
110. These will contribute to the attainment of: a) improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes; b) strengthened fisheries and aquaculture market linkages, entrepreneurships and infrastructure providing services; and c) strengthened institutions and policies for a sustainable and inclusive inland fisheries sector. This will lead to: a) enhanced smallholders' economic potential while improving natural resources management capacity and resilience to climate change; b) increased family incomes and, therefore, reduced rural poverty; and c) increased food and nutrition security among rural communities. Overall, the interventions will foster long-term development and prosperity in the target areas.
111. The successful implementation of the planned interventions presupposes that: a) there is significant interest/willingness on the part of the target beneficiaries, especially women and youth, including people with disability, to actively participate and benefit from the different activities when the requisite capacity and other limiting factors are addressed; b) a conducive regulatory framework for climate resilient fish value chain sector is available and c) there is capacity in the implementing agency and partners to deliver the proposed outputs.
112. The schematic presentation of the ToC is presented in Annex 2.

F. Alignment, ownership and partnerships

113. *Alignment with Sustainable Development Goals (SDGs)* – AFAP-2 implementation will seek to contribute to the achievement of the following SDGs: a) SDG 1 (End poverty in all its forms everywhere); b) SDG 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture); c) SDG 5 (Achieve gender equality and empower all women and girls) through the Gender Action Learning Systems and other gender-specific mainstreaming activities; d) SDG 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all); e) SDG 10 (Reduce inequality within and among countries); f) SDG 12 (Ensure sustainable consumption and production patterns); g) SDG 13 (Take urgent action to combat climate change and its impacts) by promoting climate-smart inland fisheries practices and climate-proofing of all constructed/renovated infrastructure; SDG 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development); and h) SDG 17 (Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development); this will be done by seeking partnerships with the international community, civil society, the private sector and other actors.
114. *Alignment with National Priorities* – Angola's priorities with regard to fisheries, inclusive rural poverty reduction and enhanced food and nutrition security are presented in the following policies/strategies: a) Presidential Decree on Management Measures for Marine Fisheries, Inland Fisheries, Aquaculture and Salt for the Year 2022; b) Fisheries and Aquaculture Management Plan (POPA); c) National plan to promote fisheries; d) Angola's Blue Economy Strategy; e) Plataforma de Cooperação da CPLP (2022); f) National Gender Policy; g) National Youth Policy; h) National Strategy of Food and Nutrition Security (2010-25); i) national Strategy for Climate Change (2018-2030); etc. The AFAP-2 development objective aligns well with the Government's policies and strategies. Implementation by IPA through the participating provinces' institutions will ensure alignment and complementarity with other policies, frameworks and strategies in the subsector.
115. *Alignment with the United Nations Sustainable Development Cooperation Framework (UNSDCF)* – AFAP-2 is fully aligned with the UNSDCF, 2024-2028, especially the prosperity pillar to which IFAD is to contribute. This, in turn, is based on the national development priorities established in the: a) NDP, 2023-2027; b) 2030 Agenda for Sustainable Development; and c) principles of the UN Charter. These call for reprioritization of economic diversification and sustainable food systems under the UNSDCF. The support to sustainable food systems is grounded under the prosperity pillar, focusing on enhancing productivity and value chain development in agriculture/fisheries, as most of the population rely on subsistence farming.
116. *Alignment with IFAD Policies and Corporate Priorities* – The design and implementation of the AFAP-2 is aligned with a number of IFAD's policies. These include: a) IFAD's Strategic Framework 2016-25 whose goal is to 'enable rural households and communities to gain increasingly remunerative, sustainable and resilient livelihoods that help them permanently move out of poverty and food insecurity'. AFAP-2 will contribute to all three Strategic Objectives (SO) of the Framework (SO1: Increase rural peoples' productive capacities; SO2: Increase rural peoples' access to markets; and SO3: Strengthen the environmental sustainability and climate resilience of rural peoples' economic activities); b) the Environment and Natural Resource Management (ENRM) Policy, Environment and Climate Change Strategy, and the Land Policy; c) IFAD Poverty Targeting Policy – 2023; d) Gender Equality and Women's Empowerment (2012) and IFAD's Youth Action Plan (2019-2021); and e) Nutrition Action Plan (2019-2025) – AFAP-2's nutrition focus aligns with IFAD's corporate commitment to nutrition-sensitive interventions.
117. AFAP-2 is fully aligned with the current Country Strategic Opportunities Programme (COSOP) 2019-2024. The Project contributes to the achievement of all three COSOP SOs: a) SO1: Sustainably increase production and commercialization through access to productive resources and climate-resilient farming practices; b) SO2: Promote agricultural (fisheries) value chains and agribusiness (enterprises) through investments that stimulate rural economic activity and create employment for rural poor people; and c) SO3: Strengthen institutional, community and human capacities, and empower rural poor people to participate meaningfully in transforming rural areas.
118. *Country Ownership* – During the conceptualisation and design processes, particular emphasis was put on ensuring a participatory process involving consultation of all key stakeholders at the national, provincial, municipality and community/beneficiary levels. The consultations were led by the Government Programme Delivery Teams (PDTs). This inclusive consultation process ensured that the Project was consistent with the respective strategies, priorities and policies of the Government at the different levels and the actual needs of the target beneficiaries. The PDTs consulted widely ensuring that the key stakeholders, particularly the target beneficiaries, beneficiary institutions, and the different government institutions contributed to shaping of AFAP-2's focus. Lastly, AFAP-2 implementation will be fully immersed into the Government decentralised structures where activity planning and implementation will be undertaken through government institutions and community-based organisations; this is another avenue through which ownership will be ensured.
119. *Harmonization and Partnerships* – The AFAP-2 design process sought to coordinate and harmonize with the projects/programmes financed by IFAD, the Government of Angola and various development partners that support thematic areas related to its development objective. Essentially, the aim was to take advantage of existent synergies and avoiding duplications. IFAD is currently supporting two ongoing projects in the country: a) the Smallholder Resilience Enhancement Project (SREP) [\[73\]](#). AFAP-2's synergies with SREP could include: i) fish feed production using cereals produced by SREP; and ii) integration of aquaculture/fishing activities within SREP-supported beneficiaries to address nutrition aspects of the target population; and b) the SADCP - C&H/SAMAP could provide important lessons and build synergies with AFAP-2 on strengthening capacity for rural enterprises. AFAP-2's other potential collaboration partners, as of the time of design, are presented in Annex 1.

G. Costs, benefits and financing

a. Project costs

120. Total AFAP-2 costs are set at US\$ 90 million over the eight-year Project implementation period. A summary breakdown of the project costs by component is shown in the table below. All three project components partially contribute towards the IFAD climate finance, with a total allocation of US\$35.853 million (61% of IFAD financing).

Table 1: Project costs by Component and Subcomponent (US\$ '000)

	<u>(Kwanza '000) (US\$ '000)</u>	
	<u>Total</u>	<u>Total</u>
A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems		
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	8,105,133	9,777
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	12,928,918	15,596
Subtotal	21,034,051	25,373
B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development		
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	18,440,856	22,245
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	12,582,562	15,178
Subtotal	31,023,418	37,423
C. Component 3: Institutional Strengthening, Policy Support and Project Management		
1. Sub-component 3.1: Institutional Strengthening and Policy Support	2,588,337	3,122
2. Sub-component 3.2: Project Management	13,423,334	16,192
Subtotal	16,011,671	19,314
Total BASELINE COSTS	68,069,140	82,110
Physical Contingencies	1,177,338	1,420
Price Contingencies	24,842,738	6,470
Total PROJECT COSTS	94,089,216	90,000

b. Project financing/co-financing strategy and plan

121. AFAP-2 will be financed through contributions from the following financiers: a) IFAD12 Performance-Based Allocation System (PBAS), with a loan of US\$42.78 million. This is inclusive of the additional allocation that GoA received under IFAD12; b) IFAD12 Borrowed Resources Allocation Mechanism (BRAM), with a loan of US\$15.0 million; c) the European Union (EU), with a grant of US\$10.0 million. Domestic co-financing will include: a) GoA will contribute both in-cash (with about US\$ 6.44 million through waived duties and taxes deposited to the government counterpart account at project level), and in-kind (with about US\$ 2.78 million through office space for the PMU at central and provincial level, and contribution to salaries of the extension workers); b) private sector (enterprises, and other private entities), with an expected contribution of about US\$ 8.04 million (in cash e.g., through 4P agreements); and c) beneficiaries, who are expected to provide about US\$ 4.96 million (through in-kind contributions). The proposed financing plan is summarized in the below table.

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

Angola Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2) Components by Financiers (US\$ '000)																
	IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Bens (in kind)		Priv. Sec (in kind)		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems																
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	3,827	35.2	860	7.9	4,839	44.5	746	6.9	604	5.6	-	-	-	-	10,876	12.1
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	8,038	46.0	99	0.6	2,070	11.8	2,316	13.2	-	-	4,956	28.4	-	-	17,478	19.4
Subtotal	11,865	41.8	959	3.4	6,908	24.4	3,062	10.8	604	2.1	4,956	17.5	-	-	28,354	31.5
B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development																
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	9,811	43.2	7,653	33.7	870	3.8	4	-	-	-	-	-	4,380	19.3	22,719	25.2
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	9,119	53.0	2,143	12.4	-	-	2,288	13.3	-	-	-	-	3,663	21.3	17,213	19.1
Subtotal	18,930	47.4	9,796	24.5	870	2.2	2,292	5.7	-	-	-	-	8,043	20.1	39,931	44.4
C. Component 3: Institutional Strengthening, Policy Support and Project Management																
1. Sub-component 3.1: Institutional Strengthening and Policy Support	1,480	42.9	357	10.3	1,325	38.4	289	8.4	-	-	-	-	-	-	3,450	3.8
2. Sub-component 3.2: Project Management	10,505	57.5	3,888	21.3	896	4.9	798	4.4	2,176	11.9	-	-	-	-	18,264	20.3
Subtotal	11,985	55.2	4,245	19.5	2,221	10.2	1,087	5.0	2,176	10.0	-	-	-	-	21,714	24.1
Total PROJECT COSTS	42,780	47.5	15,000	16.7	10,000	11.1	6,441	7.2	2,780	3.1	4,956	5.5	8,043	8.9	90,000	100.0

Table 3: Project Costs by Component and Year (US\$ '000)

Angola Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2) Project Components by Year -- Totals Including Contingencies (US\$ '000)									
	Totals Including Contingencies							Total	
	2025	2026	2027	2028	2029	2030	2031		2032
A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems									
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	887	2,054	1,903	2,234	1,462	1,258	584	494	10,876
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	132	7,541	8,098	665	397	409	117	120	17,478
Subtotal	1,019	9,595	10,000	2,899	1,859	1,667	701	615	28,354
B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development									
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	179	8,080	6,762	4,627	1,233	799	517	520	22,719
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	98	6,681	6,052	2,459	1,014	672	117	120	17,213
Subtotal	277	14,761	12,814	7,086	2,248	1,471	634	641	39,931
C. Component 3: Institutional Strengthening, Policy Support and Project Management									
1. Sub-component 3.1: Institutional Strengthening and Policy Support	266	597	655	767	629	461	37	38	3,450
2. Sub-component 3.2: Project Management	2,537	2,313	1,933	2,186	2,349	2,278	2,310	2,359	18,264
Subtotal	2,803	2,910	2,588	2,953	2,979	2,739	2,346	2,396	21,714
Total PROJECT COSTS	4,099	27,265	25,402	12,938	7,085	5,877	3,681	3,652	90,000

122. It is highlighted that the overall recurrent costs are estimated at 17.6 of the total Project cost. Recurrent costs under IFAD financing represent about 19%, which is higher than IFAD's threshold of 15%. High level of recurrent costs are due to the high cost of living and decentralized Project structure, which cannot be avoided; the recurrent costs should be closely monitored during the implementation.

c. Disbursement

123. IFAD and EU funds will be disbursed through separate designated accounts opened in denominated currency for each financing instrument in a commercial bank acceptable to IFAD. The Project will open segregated operating accounts for each financing instrument in Angolan Kwanza (AOA) to make payments for eligible expenditures through these accounts.
124. The PMU will be located in Cuanza Norte, one of the five participating provinces. The financial management and procurement functions will be managed by the PMU located in Cuanza Norte. There will be only small petty cash expenditures in other provincial offices. Transfer of resources to the provinces will be made available from the operational account to the provincial sub-operational accounts.
125. The Project will maintain an operating account in AOA to receive counterpart funds from the Government for payment of taxes and duties for the implementation of the Project. The Ministry of Finance (MoF) will transfer the Government cash contributions to the MINPERMAR according to the approved AWPB, and demand from the Project. The MoF will clearly state in the official communications how much of the transferred funds are for AFAP-2 to avoid delays, and this information will be shared with the Project. The MINPERMAR will transfer government contributions to the Project's government counterpart account within 15 days of receiving the funds to avoid delays in implementation.
126. Disbursements will be based on submission of quarterly Interim Financial Reports which will be submitted to IFAD within 30 days after each quarter end and each financing instrument will be presented separately. Following disbursement procedures will be used: a) reimbursements; b) advances; and c) direct payments, which will be allowed only on exceptional cases and will be subject to IFAD's approval.
127. Both IFAD and EU financing will not be used for payment of taxes and duties.

d. Summary of benefits and economic analysis

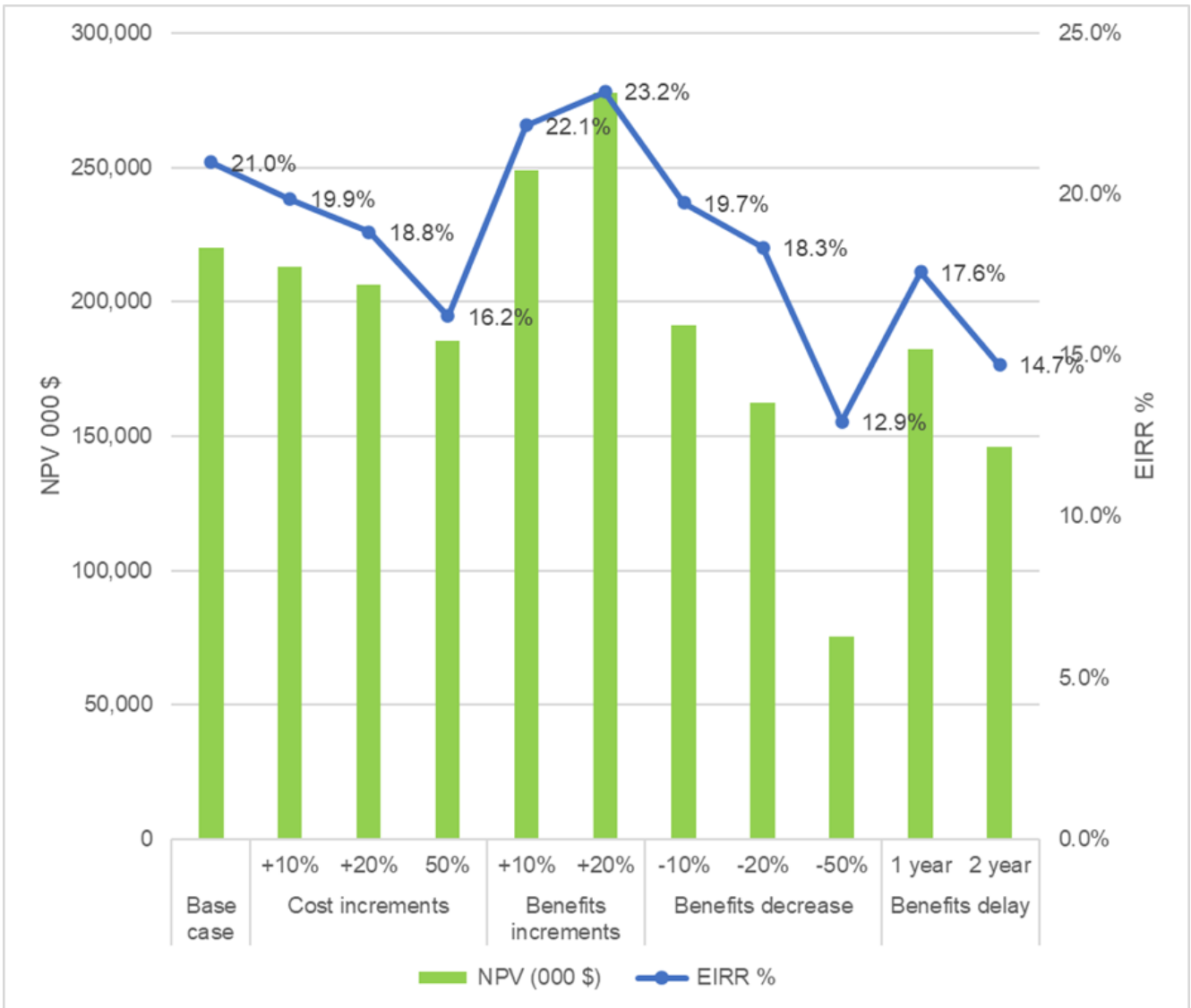
128. The economic and financial analysis (see details in Annex 5) shows that a wide adoption of proposed interventions in the fishery and aquaculture sectors would have important financial and economic benefits in the form of better on-farm economic returns, households' livelihood, and reduced poverty of rural communities depending on fishery in the lagoons. Results suggest significant potential for creating positive net cash flows for targeted households in their productive activities through AFAP-2 interventions (especially for the aquaculture ponds), confirming attractiveness for the farmers. Cash flows show that the households will have the capacity to cover the necessary operating costs.
129. **Financial analysis** – The financial analysis demonstrates that, due to the implementation of project activities, household beneficiaries would increase their financial annual net incomes. Indeed, for all the financial models developed the Net Present Values are positive and the Financial Internal Rate of Return (FIRR) are above the opportunity financial cost of capital in the country (10.8%), showing the financial effectiveness of the planned activities and providing a strong justification for the financing request. Such rate is expected to increase e.g., in case of benefits increments by 20% (plausible given the conservative analytical assumptions) confirming the convenience of the proposed investments even with higher opportunity cost of capital.
130. **Economic analysis** – The economic analysis has confirmed the viability of the investment, from the society's standpoint. Overall Economic Internal Rate of Return (EIRR) is 21%. The economic NPV is estimated at about US\$ 219.9 million over the 20-year period of the analysis, with the benefit stream based on the quantified benefits as specified above. The discount rate adopted in the economic analysis is 5%.
131. A sensitivity analysis has been undertaken on selected risks related to the Project. The results indicate that, from the economic standpoint, the investment would still be profitable/viable under all simulated changes. The results are presented in the below table and figure.

Table 4. Summary of the Economic and Sensitivity Analysis

Project performance indicators	Base case	Cost increments			Benefits increments		Benefits decrease			Benefits delay	
		+10%	+20%	50%	+10%	+20%	-10%	-20%	-50%	1 year	2 year
EIRR %	21.0%	19.9%	18.8%	16.2%	22.1%	23.2%	19.7%	18.3%	12.9%	17.6%	14.7%
NPV (000 \$)	219.948	213.072	206.196	185.569	248.818	277.689	191.077	162.207	75.595	182.116	145.758
B/C ratio	4.20	3.8	3.5	2.8	4.6	5.0	3.8	3.4	2.1	3.7	3.5

Source: Author's elaboration

Figure 2: Results of the Economic and Sensitivity Analysis



Source: Author's elaboration

132. Overall, the investment's viability is supported by the positive results shown in the sensitivity and risk analyses for adverse situations, such as cost over-runs, reduction of prices, and even reduction in the rate of adoption, as well as for all the risk categories including the climatic risk. These indicators, while monitoring performance during the implementation of the project, can provide valuable information for adjusting the strategy and interventions to improve the Project impact.

e. Exit Strategy and Sustainability

133. The AFAP-2 implementation approach is putting communities at the forefront of activity implementation. This implies that there is an element of AFAP-2's exit strategy that is inbuilt. The beneficiary communities are to be empowered and facilitated to be in charge of project planning (e.g. LMP preparation), implementation, and evaluation. This approach will not only increase the level of community ownership of the intervention, it will also enhance the feeling of shared responsibility within the community there by contributing to improved effectiveness of the Project. The Community-Based Organisations (CBOs), such as the CCPs, Producer Groups, etc., will be promoters and managers of socio-economic change and will be capacitated to plan, implement and operate subprojects.
134. To ensure the sustainability of AFAP2, the government has already acknowledged CCPs through Presidential Decree 2023 (*Presidential Decree No. 8/23: Comprehensive Management of Marine and Continental Fisheries, and Aquaculture*, Published in the Official Gazette on January 4, 2023). This enables the allocation of government funds for CCP management. It's worth noting that the central government will continue covering regular costs (e.g., salaries) of IPA to support CCPs post-project. This is envisaged under the policy changes embracing Co-management and CCP structure as the approach for management of inland fisheries with the technical and extension support of the Government. Additionally, the PDT has suggested granting legal recognition to CCPs, allowing them to collect fish levies locally to fund their daily operations. This objective is targeted for accomplishment within the first year of project implementation. The GoA emphasizes the promotion of local community cooperative structures as a key strategy for community development. Consequently, AFAP-2's community-based approach is inherently aligned with national government strategies and priorities. This concept resonates with government efforts to enhance social cohesion, foster increased local ownership, and ensure cost-effectiveness in project implementation.
135. Secondly, AFAP-2 implementation will be fully embedded into government structures at the national and, especially, provincial levels. Through consultation of the target communities, these government structures, working through their frontline extension agents, will be involved in AWPB preparation activities, overseeing activity implementation and in monitoring implementation progress. Under Subcomponent 3.1, capacities of the respective government institutions will be variously strengthened to ensure effectiveness. All these government institutions will continue to exist long after AFAP-2 activity completion.
136. Thirdly, business orientation and market linkages are a key consideration of AFAP-2. As long as the relationships established between the fisherfolks/farmers and off-takers prove to be mutually beneficial, they will form a basis for sustainability and exit of the Project. Supporting and mentoring the youth with regard to the Smart Fish Kiosks, both technically and financially, will also be a key AFAP-2 sustainability measure.
137. Lastly, for the operation, maintenance and management of all the different infrastructure to be supported by AFAP-2, community constituted committees will be put in place and their capacities built variously for continuity after AFAP-2 closure. Particular emphasis will be put on ensuring that representatives of all interest groups are part of the different committees.

3. Risks

H. Project risks and mitigation measures

138. This section provides selected risks that could have a negative impact on AFAP-2's implementation; the associated mitigation measures are also presented.

Risk	Inherent Risk	Residual Risk	Mitigation Measures
1. Political instability	Low	Low	Implement the project through existing government institutions at the national and provincial levels and provide capacity building support, where needed, with regard to institutions and the policy environment.
2. Economic instability	Substantial	Substantial	The continuing high world oil prices will result in low external financing needs during the projected period (2023-26), making the country comfortable to make debt repayments while the positive economic outlook makes debt rollovers seamless. The fact that project funds will be designated in foreign currency will serve as a hedge against the expected inflationary pressures.

3. Financial management	Substantial	Substantial	<p>a) Financial Management staff to be hired from the open market on a competitive basis; all staff members to complete the IFAD e-learning course at start-up phase and continuous capacity building during implementation period; b) timely preparation of AWPBs in line with schedule 2 of the FA and COSTAB, submission of the draft Project AWPB to IFAD for comments no later than sixty (60) days before the start of the relevant year and effective budget monitoring; c) timely preparation of the annual budget for counterpart funds and follow up on the release of counterpart funds with the MoF to ensure that there are sufficient funds to pay Project liabilities; d) an internal auditor to be hired and trained on IFAD's requirements, financial rules and regulations to review internal control processes; e) timely engagement of the external audit firm to avoid late audit submissions; g) implementation of the new ERP system (PHC), including the budget, procurement, and enhanced financial reporting module, which is capable of generating IFRs as per IFAD requirements; g) for faster implementation of the Project, start-up advance (of up to US\$ 500,000) will be provided to the Project for specific activities.</p>
4. Procurement	Substantial	Substantial	<p>a) Fully automate all procurement processes to increase transparency; b) publish all procurement opportunities and contract awards in the Public Procurement Portal in order to centralise and allow free access to public procurement information by all stakeholders; c) the Project shall include the Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations in procurement dossiers and shall additionally require all contractors, service providers, and suppliers to sign the Self Certification Form as part of bids/ proposals and contract documentation; d) establish an Anti-corruption Authority and put in place enhanced measures to address the actual and perceived risk of corruption including enhanced awareness programs to foster a culture of integrity to prevent corruption; e) amend the Public Contracting Law to address the identified gaps and/or to provide clarity where it is lacking; and f) develop a full set of Standard Bidding Documents (SBDs). In the meantime, the Project shall use the IFAD SBDs.</p>
5. Vulnerability to climate change	Moderate	Moderate	<p>a) adopting climate-smart aquaculture practices that consider changing climatic conditions and promote sustainable and efficient water use; b) using species that are more resilient to temperature fluctuations and other climate stressors; c) improving water management strategies to cope with changing rainfall patterns and potential water scarcity; d) enhancing infrastructure design to withstand extreme weather events such as floods and minimize the risk of fish escapes; e) monitoring and early warning systems to detect changes in water quality and disease outbreaks; and f) strengthening capacity building and knowledge sharing among aquaculture stakeholders to adapt to climate change impacts.</p>
6. Environment and social risks	Moderate	Moderate	<p>a) adopting proper containment and escape prevention measures to reduce the risk of farmed species escaping into the wild; b) implementing disease prevention and biosecurity measures to minimize the risk of disease transmission between aquaculture facilities and wild populations. c) practicing responsible site selection to avoid the conversion of critical habitats and to protect local biodiversity; d) reducing the use of chemicals in aquaculture through disease prevention, integrated pest management, and sustainable practices; e) ensuring responsible sourcing of feed ingredients to minimize the impact on wild fisheries and habitats; f) monitoring water quality and implementing proper waste management to mitigate eutrophication and its impacts on biodiversity.</p>

139. This section provides selected risks that could have a negative impact on AFAP-2's implementation; the associated mitigation measures are also presented.

Financial management	Substantial	Substantial	a) Financial Management staff to be hired from the open market on a competitive basis; all staff members to complete the IFAD e-learning course at start-up phase and continuous capacity building during implementation period; b) timely preparation of AWPBs in line with schedule 2 of the FA and COSTAB, submission of the draft Project AWPB to IFAD for comments no later than sixty (60) days before the start of the relevant year and effective budget monitoring; c) timely preparation of the annual budget for counterpart funds and follow up on the release of counterpart funds with the MoF to ensure that there are sufficient funds to pay Project liabilities; d) an internal auditor to be hired and trained on IFAD's requirements, financial rules and regulations to review internal control processes; e) timely engagement of the external audit firm to avoid late audit submissions; g) implementation of the new ERP system (PHC), including the budget, procurement, and enhanced financial reporting module, which is capable of generating IFRs as per IFAD requirements; g) for faster implementation of the Project, start-up advance (of up to US\$ 500,000) will be provided to the Project for specific activities.
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I. Environment and Social category

140. The main environmental and social risks identified for the fisheries and aquaculture development activities include: a) contamination of water bodies as ponds are being drained or cage culture is introduced in lagoons; b) land degradation as a result of land use change and the removal of vegetation to construct ponds and markets and construct/rehabilitate roads; c) increased waste volumes at fish landing points and markets; and d) conflicts over water use between fish farmers and nearby communities. These risks will be avoided or minimised through measures such as: a) improved water recirculation systems and use of vegetable crops to filter water before discharging it into natural water bodies; b) promoting the use of good quality local raw materials for the manufacture of fish feed and capacity building for fish feeding practices; c) erosion control measures around ponds and lagoons (vegetated dykes and bunds, trees etc.) as well as rural roads; d) improved waste management by promoting use of fish waste as well as a local circular economy; and e) educating fish farmers on the importance of appropriate feeding, cage netting quality management and strict adherence to maximum cage densities per unit area and monitoring of these activities.

141. Given that the identified risks will have site-specific impacts, and these will mostly be reversible, and in cognisance of the fact that AFAP-2 activity implementation will be in ecologically or socially non-sensitive areas, the environmental and social risk categorization of AFAP-2 is *moderate*. However, at the time of design the specific location of the ponds that will be constructed (in clusters of 25 ponds at each location) and the roads that will be rehabilitated or constructed was not known. Thus, site specific environmental and social management plans could not be elaborated at design. Therefore, an environment, social and climate management framework (ESMF), including a generic environment, climate management plan has been developed. The ESCMF will guide the management of environmental, social and climate change risks during implementation of AFAP-2 and complement the criteria outlined for the siting of the aquaculture and fisheries infrastructure, including the hatcheries, ponds, processing facilities and roads.

142. As articulated in the description of the Components (section D) and in the generic ESMP, development of lagoon community/participatory management plans and their effective implementation will ensure more sustainable management of the fisheries resources and their habitats. Capacity building of the communities to develop and implement the plans will be key to ensuring sustainability of the lagoons and fisheries-dependant livelihoods. A key intervention for sustainable fisheries is the exchange of inappropriate fishing gears with sustainable gears. Water availability, including quantity and quality, will inform the selection of sites for the fishponds and the water from the ponds can be utilised for watering vegetable gardens in close vicinity. Integrated livestock and aquaculture systems will provide benefits of organic fertilisation of the ponds. Ensuring vegetation around the ponds and lagoons will contribute to stabilising the banks and limiting the erosion. The capacity building and environmental management activities will be incorporated into Lagoon management plans as well as the Aquaculture Field Schools manuals and curricula. Under Component 2, waste management and resource use efficiency will be the main areas of focus. This will be achieved through effective waste management at the Smart Fish Kiosks and markets with fish waste being collected and recycled, aligning with the concept of a circular economy. In addition, renewable energy sources for drying and smoking of the fish will also reduce the pressure on natural resources, such as fuel wood.

J. Climate Risk classification

143. The climate risk classification of AFAP-2 is moderate recognising that climatic events such as floods and droughts will have potential adverse impacts on productivity of AFAP-2 ponds and roads if not well sited and constructed as well as the water availability for the aquaculture activities. Given the potential adverse impacts of climate change on achieving the AFAP-2 objectives, specific measures need to be articulated to increase resilience to the effects of climate change and reap long-term advantages of adaptation best practises. These measures are articulated in the climate risk management plan that provides options to enhance the climate resilience of the communities and their livelihoods. As part of the risk management, ensuring water availability will be a criteria for selection of geographic areas of intervention and siting of the ponds, resource use efficiency including fish feed will be ensured, climate resilient infrastructure development options will be integrated and capacity building of the target beneficiaries in climate change risk management will be undertaken. The AFAP2 activities are not expected to result in increased vulnerability to climate change but on the contrary, they will improve the climate resilience of the communities and their livelihoods.

144. Under Component 1, informed siting, raised ponds, boundary nets and vegetated dykes constructed around the ponds will minimise the impacts of floods. Water harvesting and pond liners, as well as the inclusion of small end-line water canals, can also contribute to addressing droughts. The livelihoods diversification through the aquaculture activities contributes to climate change resilience of the target communities. For Component 2 the main climate change adaptation measures will be through the improved design and construction of the market related infrastructure such as inclusion of drainage and water control structures on rural roads in areas that are prone to floods. Use of trees in the landscape for aquaculture and fisheries production will help regulate the micro-climate and minimise the potential effects such as erosion when infrastructure is constructed.

4. Implementation

K. Organizational Framework

a. Project management and coordination

145. Project Management – Management of the AFAP-2 Project will largely follow the AFAP management arrangements with some modifications aimed at improving effectiveness and efficiency of implementation. The Project delivery systems will be integrated into the decentralised organisational structures that cascade from the national to communal levels. MINPERMAR will be the Project's lead agency and will delegate the implementation of the project to IPA to oversee the Project's implementation. IPA will recruit a PMU for the day-to-day management of the Project. The PMU will recruit a core team of experienced staff to manage and oversee AFAP-2 implementation. It will also have access to TA for some of the expertise that will be needed for effective Project implementation. The following is the foreseen PMU composition: a) Project Manager; b) Finance Management Officer; c) Monitoring and Evaluation Officer; d) Procurement and Contracts Manager; e) Aquaculture Specialist; f) Fisheries Specialist; g) Business Development Specialist; h) Infrastructure Specialist (TA); i) Community Development and Social Inclusion Specialist; j) Internal Auditor (TA); k) Accountant; l) Procurement Assistant; m) Monitoring and Evaluation Assistant; n) Project Assistant; and o) Driver (3). The Terms of Reference (ToRs)/Job Descriptions (JoDs) of all the PMU staff and TAs are presented in the Project Implementation Manual (PIM).
146. Unlike the AFAP implementation arrangements, AFAP-2 embraces a more decentralized approach with the Provincial structures actively engaged in project implementation, including producing provincial work plans and budgets, implementation of field activities and provincial-focused progress reporting. In line with this decentralised approach, the PMU will be located in Cuanza Norte, one of the five participating provinces. Cuanza Norte is more centrally located, considering the other four participating provinces. This arrangement will make Project management more effective by locating the PMU close to the target beneficiaries and reducing monitoring-related costs during the course of Project implementation.
147. At the Provincial level, AFAP-2 implementation will be coordinated by the IPA Representatives; they will serve as the AFAP-2 Provincial Coordinators and they will be supported by an Office Assistant and a Driver. An AFAP-2 Focal Person, based in Luanda at MINPERMAR headquarters, will be appointed, from MINPERMAR staff, to serve as a Liaison Officer on AFAP-2 related aspects in Luanda, as and when needed.
148. At the municipality level, initiation of all AFAP-2 activities will necessarily require consultation with the Municipality Administrators; this will be aimed at ensuring that Municipality Administrators are aware of AFAP-2's interventions in their communities and could be called upon for facilitation whenever considered necessary.
149. With regard to the oversight function a Project Steering Committee (PSC) will be established at the national level and chaired by the MINPERMAR Minister. It will be composed of members from institutions with direct relevance to the achievement of AFAP-2's development objective (such as Ministry of Public Works, Urbanism and Housing (MINOPUH), Ministry of Energy and Water (MINEA), Ministry of Culture and Tourism (MCTA), and the Ministry of Environment (MINAMB) and the public entities dealing with gender, youth and people with disabilities). Considering that AFAP-2 will employ an integrated approach, including promoting of selected livestock, it is recommended that the Ministry of Agriculture and Forestry (MINAGRIF) be a member of the PSC. Also, given AFAP-2's focus on enterprise development and increasing the role of the private sector, especially with regard to market linkages, consideration should be given to include: a) the National Institute for Support of SMEs (INAPEM); b) the Directorate of Rural Commerce and Development (DRCD); and c) Banco de Desenvolvimento de Angola (BDA).
150. At the provincial level, a Provincial Project Steering Committee (PPSC) will be established in each participating province, chaired by the Provincial Governor. The PPSC composition will include the Provincial Director of Agriculture, Livestock and Fisheries Directorate, the Provincial IPA representative, a representative of civil society or NGO, a representative of the private sector, at least two representatives of beneficiaries/producers' organisations and any other representative that may be deemed necessary in guiding AFAP-2's effective implementation.

b. Financial Management, Procurement and Governance

151. Financial Management (FM) functions will be performed by an experienced FM Officer and an Accountant at the PMU located in Cuanza Norte. There will also be an internal auditor who will report to the Project Steering Committee (PSC). Recruitments will be done on a competitive basis, and there will be annual performance review to ensure staff performances are at a satisfactory level.
152. The Government internal control policies and procedures will be applied to the Project. In addition, the PIM will include a detailed FM section and the borrower will comply with IFAD and EU's FM rules and procedures. The Borrower will ensure that adequate internal controls and internal audits are applied to the Project operations and that Project funds are managed in an adequate control environment acceptable to IFAD. All documents and records of the Project will be retained in accordance with IFAD's policies and procedures.
153. The AWPB will be prepared in sufficient detail with IFAD templates and submitted to IFAD for no objection sixty days (60) prior to the end of each fiscal year. Financial and physical progress against approved budgets (AWPB) will be monitored monthly by various components, subcomponents and expenditure categories.
154. The basis of the accounting will be the International Public Sector Accounting Standards (IPSAS) cash basis. The Project will purchase and install automated accounting software to maintain the Project's accounts and generate reliable financial information and reports. Financial records will be segregated for each financing instrument. The project will prepare Interim Financial Reports in IFAD's standard templates and submit the reports to IFAD within 30 days of the end of each quarter. The Project's financial year-end will be 31st December, and unaudited annual financial statements will be submitted to IFAD by 30th April of each financial year.
155. Possible collaboration with FAO and WFP is foreseen at design. In case of collaboration, FAO and WFP will be required to comply with IFAD's financial management requirements, including annual external audit and submission of quarterly IFRs. All FM rules that apply to the Borrower shall also be included in the project agreement signed between the Government and the UN Agencies.
156. Since the Project will also be co-funded by the EU, the PMU will ensure compliance with EU financial management requirements, including accounting and financial reporting, which will be detailed in the PIM.
157. *External Audit* – The Project's annual financial statements will be audited by a private external audit firm acceptable to IFAD in accordance with International Auditing Standards (SAI) and IFAD's Handbook for Financial Reporting and Auditing. The audit report, together with the Management Letter, will be submitted to IFAD within six (6) months after the end of each financial year. The audit terms of reference will be subject to IFAD's No Objection, and the scope of the audit will cover all financiers and provinces.
158. The project includes grants and subsidies category, where a detailed grants manual will be developed at start-up, which is outlining how the grants will be implemented. Based on the developed manual, FM section of the PIM will also be tailored to include specific arrangements for this category.
159. IFAD-financed and managed operations will be governed under the Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations, as available on IFAD's website. The Project will ensure full compliance with all applicable requirements.

Procurement Management

160. The legal and regulatory framework that will govern procurement during AFAP-2 implementation is established in Law No. 41/20 of 23rd December 2020. The law contains the institutional framework that governs the procurement for goods, works and services. An assessment of the public procurement legal and regulatory framework showed that the procurement law gives due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability.
161. However, the assessment also identified the following weaknesses in the national procurement law: a) failure to distinguish consulting services from other services; b) lack of selection methods for consulting services; c) failure by the law to obligate contracting entities to uphold confidentiality which is likely to affect integrity of the bidding process; d) the application of approval procedures in a discretionary manner without taking into account the level of procurement risk; e) lack of recognition of procurement as a career within the civil service; and f) lack of standard bidding documents for both international competitive bidding and consulting services.
162. The assessment found that the risk level was Accordingly, the AFAP-2 procurement of goods, works and services will be carried out using the national procurement law with the addition that it shall comply with IFAD requirements to be specified in the Financing Agreement and the Procurement Arrangements. In cases of contradictions between IFAD Procurement Guidelines and the national procurement law, IFAD Procurement Guidelines will take precedence and govern.
163. Due to the weaknesses noted in the national legal framework, procurement under international competitive bidding and the procurement of consultancy services will specifically use IFAD procedures and IFAD standard bidding documents.
164. Since IPA is to oversee AFAP-2 implementation, its assessment revealed that it has adequate working facilities. However, it was noted to have inadequate staff with knowledge and experience in procurement under IFAD procedures and in contract management. In addition, its procurement structures at the provincial level still need capacity augmentation. To that effect, AFAP-2 procurement will be centralized at the PMU level.
165. The PMU shall review and finalize the draft Procurement Plan covering the first 18 months of the project that has been prepared during the project design. It will be followed by successive 12-month plans synchronized with the AWPBs during implementation. The project will use the IFAD's Online Procurement End-to-End (OPEN) planning and tracking tool to prepare, clear, and update its procurement plan and to carry out procurement transactions. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs.
166. IPA's capacity to oversee procurement functions should be reinforced in the following areas to ensure that value for money and quality are enhanced: a) procurement strategy and procurement planning process; b) contract management and administrative systems; c) procurement risk management; and d) procurement personnel capacity.

Procurement Governance

167. As already indicated, the national legal and regulatory framework that will govern procurement during AFAP-2 implementation is established in Law No. 41/20 of 23rd December 2020. For effectiveness, the PMU will competitively recruit an experienced Procurement Specialist and a Procurement Assistant to oversee the provision of the AFAP-2 procurement function. Arrangement will be made to provide training of the PMU's procurement staff and the IPA staff who shall be involved in the implementation of the Project.
168. All procurement documentation issued to bidders will include and comply with the requirements laid out in: a) IFAD's Revised Policy on Preventing Fraud and Corruption in its Activities and Operations; b) Policy on preventing and responding to sexual harassment, sexual exploitation and abuse; c) IFAD's Anti-Money Laundering and Countering the Financing of Terrorism Policy; and d) IFAD's Social, Environmental and Climate Assessment Procedures (SECAP).

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

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

169. AFAP2 will collect quality and updated data, analyse it to produce reports for monitoring Project performance, Project evaluation, and as a basis for evidence-based planning. The Project will also ensure development of a Project M&E manual which will serve as an integral part of the overall PIM. The M&E manual will serve as a guiding tool for implementing M&E activities, from planning, to the monitoring, and evaluation of the Project.
170. **Planning** – AFAP-2's planning cycle will follow GoA's planning and budgeting cycle. The cycle will commence with the preparation of the AWPB as a key instrument for implementation, operational control and annual monitoring and evaluation of the Project physical and financial progress. AFAP-2 will apply a bottom-up participatory planning process for the AWPB preparation with the participating municipalities and provinces playing a significant role. The Monitoring and Evaluation Officer, to be based within the National PMU, will be responsible for leading and coordinating the planning processes as well as preparation and consolidation of the Project's AWPB. The approved AWPB will be the only mechanism through which AFAP-2 resources would be spent. The AWPB for the first year will be based on the PDR and its annexes and will be revised by the PMU at start-up. The subsequent AWPBs will follow the overall annual planning cycle with adjustments made, when necessary, following recommendations from joint IFAD-GoA supervision missions.

171. **Monitoring and Evaluation (M&E)** – AFAP-2's Logical Framework will form the basis of the Project's annual planning, budgeting, and M&E. However, given its limitation with regard to the number of indicators specified, the Project will collect data using a broader operational framework for M&E to ensure that sufficiently detailed information is available for management decision making, and to facilitate the preparation of reports that meet the needs of government, IFAD and other key stakeholders in the sector. The AWPB will also be instrumental for monitoring physical progress against financial execution of planned activities, as well as performance of Project implementing partners.
172. **M&E System** – The M&E system will be anchored in the Project's Logical Framework, which incorporates IFAD Core Indicators and Project-specific indicators for comprehensive monitoring. The Project will develop a Management Information System (MIS) which will facilitate real-time data management, ensuring the collection of disaggregated data on key project activities. The M&E system will incorporate elements on environment, social inclusion, and nutrition activities. Servers within the IPA will host the MIS, but will need enhancing to ensure improved system capacity.
173. The AFAP-2's evaluation strategy will use quantitative and qualitative methods to determine how it contributed to improved livelihoods and nutrition among beneficiaries. Mandatory *Core Outcome Indicator (COI) Surveys* at baseline, midline, and end-line and Annual Outcome Surveys (AOS, to be initiated after the Mid-Term Review) will supplement selected Project qualitative studies to ensure a strong results-based project management. A Project completion report/final evaluation will consolidate data and provide recommendations for future efforts.
174. **Reporting** - Quarterly, bi-annual and annual reports will be produced by the respective implementing departments, with emphasis on a bottom-up reporting system, where provinces will be accountable for their activities and results with formal reporting responsibilities to the PMU; the PMU will consolidate the different reports to produce an AFAP-2 wide report, namely, the Semi-annual and Annual Progress Reports for submission to GoA and IFAD. Progress reports will also be made available prior to Supervision Missions along with necessary annexes, such as updated logical framework, procurement plan, and financial execution.
175. The Monitoring and Evaluation framework will be central to the AFAP-2's implementation, making sure to align it with the Angola 2019-2024 COSOP Results' Framework. Building on lessons learned from AFAP, the identified M&E risks, including limited capacity, will be addressed through training existing government technical staff and also the extension officers to ensure sustainability. Capacity gaps which are expected to affect delivery of the main M&E deliverables will be targeted for improvement through M&E capacity building workshops and support during start-up; refresher training will be provided during the course of implementation, as and when considered necessary. In addition, the Project will provide M&E-specific TA twice a year (10 days per mission) for the first two years of AFAP-2 implementation (for a total of 40 days in two years). The TA will work with the M&E Unit of the PMU to set up the needed tools (for the national and provincial levels) for an effective Project M&E function. The TA will progressively build the capacity of the M&E Unit of the PMU to a level where it would be able to capture (data disaggregate by gender and age), collate, analyse, document and report on all aspects of the project.
176. **Staffing** – An M&E Specialist will be competitively recruited for the Project at the national level and also M&E Assistants for each of the provinces. The M&E Specialist will be responsible for coordinating Project M&E activities, such as preparing the M&E Plan, setting up M&E System, preparing Project surveys, annual planning processes, data management and reporting, as well as providing advice to Project management. The M&E functions will be supported by the M&E Assistants at Provincial PPIU, in collaboration with the entire Project team and relevant stakeholders.
177. Drawing from lessons of past projects where M&E and KM responsibilities were carried out by the M&E Specialist, AFAP-2 aims to address potential challenges by hiring a dedicated KM Officer at the national level. This officer, working closely with the M&E team, will lead and coordinate KM activities, ensuring effective implementation of the KM action plan and enhancing capacity through Technical Assistance. The Project will make sure that AFAP KM and Communications Strategy will be reviewed and further developed to provide strategic direction for the AFAP-2 strategy.
178. **Knowledge Management and Learning (KM&L)** – Knowledge Management will play an integral role in the implementation of AFAP-2, ensuring that the Project promotes continuous learning. The AFAP-2 M&E system will serve as the cornerstone of the KM&L process, making sure to capture and store information based on detailed indicators from the results framework. AFAP-2 will carry out diverse KM activities including case studies, research, stakeholder interviews, and surveys, which will be employed to deepen understanding and document factors contributing to successes and bottlenecks of the Project. The PMU will hold the responsibility of translating the findings of research supported by the Project into accessible knowledge products to be disseminated amongst CCPs, extension officers, Component Technical leads and other relevant fisheries' sector actors. The Project will also develop a dashboard or database accessible to all Project stakeholders, which will facilitate widespread sharing of lessons learned.

b. Innovation and scaling up

179. AFAP-2 aims at utilizing innovative methods to generate benefits in inland fisheries and aquaculture production. Within this framework, the innovations will address challenges such as habitat degradation in inland fisheries, as well as low production and productivity in aquaculture. The major successful scalable dimensions of AFAP1 in Bengo, Kwanza Norte and Malange were the established CCPs, as a key component of the co-management approach, and community-based aquaculture production approaches. The PDR has emphasized the significant public interest that spurred the formation of CCPs and the creation of new fish ponds beyond the project's designated areas. These achievements serve as the foundation for ongoing innovation in AFAP2, which now encompasses strategies to improve access to fisheries resources, boost pond-based fish production, introduce cage aquaculture in the lagoons, and enhance value addition and market connections. However, the scaling-up dimensions include policy interventions to recognize the role of CCPs and strengthen aquaculture extension services. The primary objective is to promote more climate-resilient and responsible approaches to both inland fisheries and small-scale aquaculture. Some of the Project's innovative approaches include:

- *Innovations to Enhance Indigenous Fishing Practices* – in some river lagoons, communities practice a traditional form of fishing dependent on changing flooding regimes. Fish gets trapped in artificial pools within the river system during flash floods, and are harvested when water recedes or pumped out. These "river-pools" serve as abundant sources of diverse fish species, benefiting local communities in terms of nutrition and income. AFAP-2 will introduce some innovations to enhance the sustainability and effectiveness of this practice, incorporating improvements such as strategically establishing artificial pools along the riverbank to broaden access for vulnerable households;
- *Cage Aquaculture Technology* – this will be introduced for the first time in some of the provinces to enhance fish production and profitability. Fish cages represent innovative fish culture systems that increase water productivity, enable precise monitoring, management and easy harvesting. In addition, the Project will introduce utilization of solar lights at selected fish cages and ponds to provide continuous illumination, offering several benefits that contribute to the well-being and productivity of the fish. Solar lights enable fish to extend the feeding periods beyond daylight hours with nutritious natural insects; this, in turn, contributes to faster growth rates and improved overall health;
- *Solar-Powered Pond Aerators* – these will contribute significantly to enhanced fish production by improving oxygenation, water quality, temperature regulation, nutrient distribution, and disease prevention. These systems offer a sustainable and energy-efficient solution for promoting the overall health and productivity of fish in aquaculture ponds; and
- *Smart Fish Kiosks and Smart Markets* – for effective market access, AFAP-2 will introduce Smart Fish Kiosks and Smart Markets that will use renewable energy and sustainable infrastructure to reduce food wastage and achieve sustainable energy in marketplaces. The markets will essentially be intelligent market outlets equipped with energy-efficient facilities, supporting EV-charging points, waste management, and offering real-time market demand/pricing information.

180. With regard to scale, it is highlighted that AFAP-2 is, itself, a scaling up intervention. Two of the innovative practices that were tested and proven under AFAP that will be scaled up by AFAP-2 include:

- *'Nutripod' Technology* – This involves establishment of an isolated pond where polyculture of all cultivable fishes is done, and allows all community group members to access fish, in a controlled and sustainable manner, for food and enhance nutrition;
- *Participatory Fisheries Co-management system* – this is being done through the CCP which coordinate the process of participatory preparation of the Lagoon Management Plans. The CCPS are also charged with the responsibility of surveillance for the target lagoons to ensure compliance. In addition to using CCPs for effective and sustainable resource management, AFAP-2 will initiate the process of getting them recognised as legal entities.

181. The AFAP-2 scaling up agenda is building on the scaling up efforts that were already initiated during AFAP. The Government used some of its resources meant for poverty reduction to scale-up the AFAP successes. This was done under the framework of the Integrated Plan for local development and poverty fight (PIDLCP), approved by the *presidential decree* N°140/18 de 6 de Junho. In addition, the Province of Cuanza Norte has replicated the Fisheries Co-Management model in the Banze community; this was after the Banze community learned of the benefits being enjoyed by Cazanga community.

182. Furthermore, in order to promote scaling up in future interventions, AFAP-2 will document the lessons learnt and best practices to ensure effective adoption and adaptation in those interventions.

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

a. Project Target Group Engagement and Feedback.

183. *Objectives of Engagement and Feedback* – The purpose of the engagement and feedback process is for achieving effective stakeholder involvement and promoting greater awareness and understanding of issues so that the project is carried out effectively within budget and on-time. The goals of the public consultations are to provide AFAP-2 with: a) the status of implementation of the identified measures; b) a sense of the concerns, priorities, and aspirations of the community members as they implement the measures; c) information to shape the project as it progresses; and d) whenever possible, specific recommendations and proposals.
184. *Responsibilities* – The PMU will be responsible to ensure effective implementation of the engagement/feedback process by: a) promoting openness and communication; b) ensuring effective stakeholder involvement; c) evaluating the effectiveness of the engagement plan in accordance with the expected outcomes.
185. *Information Disclosure* – The type of information to be disclosed to the various stakeholders will depend on their interests and how they will be affected by the project; on the other hand, it could depend on how AFAP-2 activities may be affected by them. Thereafter, various communication tools will be utilized for the engagement process. These could include local newspapers, radio advertisements, direct mailings to communities, presentations with or without focus group sessions, targeted mail, one-on-one meetings, presentations, seminars, and general use of social media.
186. *Stakeholder Engagement Techniques* – A variety of engagement techniques will be used to build relationships with stakeholders, gather information from stakeholders, consult with stakeholders, and disseminate project information to stakeholders. The major elements of the consultation programme should be timed to coincide with significant planning and decision-making activities in the project cycle.
187. *Getting Feedback* – Various approaches will be used to mobilize participation and feedback from expected or actual beneficiary communities and their organizations throughout the project cycle. These include: a) scheduling regular updating meetings with key stakeholders; b) availing suggestion boxes at AFAP-2 offices; c) engaging stakeholders in participatory planning (bottom-up approach); d) engaging stakeholders in participatory M&E; e) conducting surveys to ask beneficiaries to assess progress, gauge their satisfaction with services delivered, and evaluate project results at project mid-term and end-line, and at shorter intervals, as needed; and f) including beneficiary representatives or civil-society organizations (CSOs) as members of project steering committees; this would induce a higher degree of beneficiary influence over decision making.

b. Grievance redress.

188. The AFAP-2 grievance redress mechanism (GRM) will use existing formal and informal GRMs, strengthened or supplemented as needed with project-specific arrangements, and will be proportionate to the risks and impacts of the project. The various committees (e.g. CCPs) at the local level and the local community leaders (Sobas) will provide a first level of the mechanism, receiving any complaints and informal resolution. The various committees and leaders will be represented or will provide oversight in the project co-management as well as creating awareness that they may also be used for the transmission of grievances to these *fora* for informal resolution. Certain conflicts that cannot be resolved by committees may be resolved by local leaders. For issues concerning secondary or external stakeholders (contractors or service providers), and/or are outside the capacity of the community or local authorities to resolve, they should be presented to the PMU for processing (e.g. transmission to district/municipal authorities, contractors, etc.). Issues that cannot be resolved at this level should be taken to the attention of Local Authorities thus making use of existing systems and structures. In cases where the community member(s)/group who lodged the complaint is/are not satisfied with the decision of the Project team or Local Authority, then as an ultimate recourse may be through the court system. Decisions on grievances redress and communication of these to the complainant should be timely at all levels to promote trust in the system and improve attitudes about the project interventions within the community. The channels used for raising the grievance should be used to feedback the decision to the complainant and grievance resolution times tracked.
189. In addition to the GRM outlined above, IFAD's complaints procedure SECAPcomplaints@ifad.org can be used where necessary to receive and facilitate resolution of concerns and complaints with respect to alleged non-compliance of IFAD's environmental and social policies and the mandatory aspects of the SECAP. The procedure allows affected complainants to have their concerns resolved in a fair and timely manner through an independent process.

N. Implementation plans

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

190. Projects in Angola tend to experience considerable delays to effective, on-the-ground activity implementation. To that effect, the design process has been proactive and sought to address some of the factors responsible for the start-up delays. The following has been done at the design stage to improve implementation readiness and reduce start-up delays: a) preparation of a draft Annual Work Plan and Budget (AWPB) and the associated Procurement Plan; b) preparation of a draft Project Implementation Manual (PIM); and c) preparation of all job descriptions/terms of reference for all the different Project Management Unit positions at different levels. In addition, to facilitate a prompt start-up, a withdrawal up to US\$ 500 000 may be made from the IFAD Loan to pay for expenditures related to the Project start-up before fulfilment of the conditions precedent to withdrawal. The start-up activities will include: Recruitment of key staff, finalizing the Project Implementation Manual including the Financial procedures, accounting and procurement manual, finalization of the first AWPB and procurement plan, organization of a Start-up workshop, procurement of an accounting software, Finalization of Investment/grant guidelines, baseline survey and mapping of beneficiaries and templates.
191. *Supervision* – AFAP-2 will be jointly supervised by IFAD and GoA to assess achievements and lessons learned and, when required, provide implementation support with the objective of ensuring effective Project implementation and increase the likelihood of achieving the target objective. Missions would be fielded at least once every twelve months. However, and depending on the extent and quality of implementation progress, implementation support Missions would be fielded as frequently as warranted by conditions on the ground so as to address any emergent issues that may have the potential to negatively impact Project implementation. The composition of the supervision/implementation support Missions would be influenced by the issues identified as needing redress.
192. *Mid-Term Review (MTR)* – Undertaking of an MTR is statutory requirement that will be included in the Financing Agreement. It will be undertaken halfway through AFAP-2 implementation; the process will be led by the Government but with the participation of IFAD. It will evaluate whether the Project is on course to achieve the objectives. During the MTR, particular emphasis will be put on assessing sustainability and the extent of implementing the exit strategy. This would be critically important, especially for those investments that have a public good nature and would require continuous involvement of the Government after the formal AFAP-2 completion date. Overall, the MTR process will seek to identify any prevailing constraints, including implementation's ability to cope with AFAP-2's scope, and recommend such re-orientation/restructuring as may be required to help the Project to achieve its development objective.
193. *Project Completion Plans* – The Project Completion Review (PCR) exercise at the end of AFAP-2 implementation will be led by IFAD with key contributions from the borrower, covering the elements described in the general conditions of the Financing Agreement as described in the 2023 PCR guidelines. The main purposes of the completion review process will be to promote accountability, reflect on performance and elicit lessons learned to inform future programme/project design and to define an appropriate post-project strategy. The learning dimension of the completion process will be used by both IFAD and the Government as the foundation for improvements in future programme/project design and implementation. The completion review process will also be critical for identifying opportunities for scaling-up best practices. The PCR would need to be undertaken after Project completion but before the Project closure period. As part of the completion activities, a Beneficiary Impact Assessment (BIA)/end-line survey will be undertaken and findings used to inform the Project Completion Report.

Footnotes

[1] Wikipedia: Economy of Angola (https://en.wikipedia.org/wiki/Economy_of_Angola).

[2] Economist Intelligence Unit, Angola Report, November 2023.

[3] African Economic Outlook 2023, African Development Bank.

[4] Market Study on the Supply and Demand of Continental Fish and Small-Scale Aquaculture, IPA 2019

[5] The original AFAP, implemented from 2015 to 2023, was restructured, at the MTR stage in 2018, to make it more effective; its focus was changed from being an investment project to piloting selected technologies. Thus, AFAP successfully tested the social, economic and technical viability of two technologies; smallholder aquaculture and fisheries co-management.

[6] AFAP PCR and AFAP PCN Reports

[7] Wikipedia: Economy of Angola (https://en.wikipedia.org/wiki/Economy_of_Angola).

[8] Economist Intelligence Unit, Angola Report, November 2023.

[9] African Economic Outlook 2023, African Development Bank.

[10] [African Economic Outlook 2023](#), African Development Bank.

[11] Ibid.

[12] Ibid.

[13] Ibid.

[14] [Angola Overview: Development news, research, data | World Bank](#)

- [15] [Angola quits Opec after clashes with Saudi Arabia](#)
- [16] Capital Business ([Angolan economy to grow 3 pct in 2024: IMF - Capital Business \(capitalfm.co.ke\)](#))
- [17] <https://www.bing.com/search?q=United+Nations+Data+Portal+-+Population+Division&cvid>
- [18] Banque mondiale, « Indice GINI – Angola », 2018.
- [19] Programme des Nations Unies pour le développement (PNUD), 2022. *Rapport sur le développement humain, 2021/2022*.
- [20] Climate - Pests - and Economic Conditions Driving Food Security Crisis in Southern Angola, Global Agricultural Information Network, 27th December, 2021
- [21] <https://www.ceicdata.com/en/angola/agricultural-production-and-consumption/ao-total-fisheries-production>
- [22] <https://www.worldbank.org/en/country/angola/overview>
- [23] <https://www.effectivecooperation.org/angolas-national-development-vision-and-plans>
- [24] <https://www.google.com/search?q=current+contribution+of+fisheries+of+gdp+of+angola>
- [25] FAO 2018
- [26] Market Study on the Supply and Demand of Continental Fish and Small-Scale Aquaculture, IPA 2019
- [27] AFAP PCR and AFAP PCN Reports
- [28] https://en.wikipedia.org/wiki/Convention_on_Biological_Diversity#Parties
- [29] <https://www.fao.org/3/i4356en/i4356EN.pdf>
- [30] https://en.wikipedia.org/wiki/United_Nations_Convention_on_the_Law_of_the_Sea
- [31] <https://www.fao.org/port-state-measures/resources/detail/en/c/1111616/>
- [32] Barbosa, R., Santos, J., & Silva, T. (2021). Climate Change Impacts on Aquaculture in the Benguela Current Ecosystem: Challenges and Opportunities. *Reviews in Aquaculture*, 13(3), 833-846.
- [33] Bento, C., Mendes, P., & Guedes, I. (2022). Vulnerability Assessment of Angolan Aquaculture to Climate Change. *Aquaculture Economics & Management*, 26(1), 87-101.
- [34] Food and Agriculture Organization (FAO). (2020). Climate Change Implications for Fisheries and Aquaculture: A Global Analysis. FAO Fisheries and Aquaculture Technical Paper No. 627. Rome, Italy. Retrieved from <http://www.fao.org/3/ca9229en/CA9229EN.pdf>.
- [35] IPCC Sixth Report Impacts, Adaptation and Vulnerability: Chapter 4: Water. Accessed on <https://www.ipcc.ch/report/ar6/wg2/chapter/chapter-4/>; Intergovernmental Panel on Climate Change Special Report on Global warming of 1.5°C.
- [36] Estrada, R. G., da Silva, M. N. F., & Agostinho, S. C. (2008). Mammals of Angola, Africa. *Bonn Zoological Bulletin*, 56(2), 150-171.
- [37] Beilfuss, R., & dos Santos, R. (2002). The Avifauna of Angola: Its Conservation, History, and Literature. *Ostrich*, 73(3-4), 168-175. doi: 10.1080/00306525.2002.9639889.
- [38] Ministry of Environment of Angola. (2013). National Biodiversity Strategy and Action Plan of Angola. Retrieved from <https://www.cbd.int/doc/world/ao/ao-nbsap-01-en.pdf>.
- [39] World Wide Fund for Nature (WWF). (2021). Conservation in Angola. Retrieved from <https://www.worldwildlife.org/places/angola>.
- [40] Food and Agriculture Organization (FAO). (2020). Global Forest Resources Assessment 2020: Main Report. FAO, Rome, Italy. Retrieved from <http://www.fao.org/3/ca9825en/ca9825en.pdf>.
- [41] Climate risk in Angola: Country risk profile (2018). Accessed from: https://www.climatelinks.org/sites/default/files/asset/document/2018_USAID-CCIS-Project_Climate-Risk-Profile-Angola.pdf
- [42] World Economic Forum, 2022; Gender Gap report
- [43] <https://hdr.undp.org/sites/default/files/Country-Profiles/AGO.pdf>
- [44] https://en.wikipedia.org/wiki/Education_in_Angola
- [45] World Economic Forum, 2022; Gender Gap report

[46] Angola does not have an age definition; however, Angola is a signatory to the African Charter which defined youth as 15 to 35 years of age.

[47] [https://www.citypopulation.de/en/angola/admin/11__bi%C3%A9/ AND INES](https://www.citypopulation.de/en/angola/admin/11__bi%C3%A9/AND_INES), 2014

[48] World Bank <https://data.worldbank.org/indicator/SL.UEM.1524.ZS?locations=AO>

[49] INE 2014; General Census

[50] World Directory of Minorities and Indigenous People

[51] <https://www.globalhungerindex.org/angola.html>

[52] Global Nutrition Report, 2022

[53] Angolan Demographic and Health Survey, 2015/2016

[54] <https://data.worldbank.org/indicator/SH.STA.WAST.ZS?locations=AO>

[55] <https://data.worldbank.org/indicator/SH.STA.OWGH.ZS?locations=AO>

[56] Global Nutrition Report (2021), Angola

[57] Ibid

[58] The original AFAP, implemented from 2015 to 2023, was restructured, at the MTR stage in 2018, to make it more effective; its focus was changed from being an investment project to piloting selected technologies. Thus, AFAP successfully tested the social, economic and technical viability of two technologies; smallholder aquaculture and fisheries co-management.

[59] PDN 2023 – 2027 (National Development Plan 2023 – 2027)

[60] FAO 2019

[61] [FAO Fisheries & Aquaculture](#)

[62] IFAD-financed South Sudan Livelihood Development Project (SSLDP); PCR

[63] IFAD-financed Hilly Areas Sustainable Agriculture Development (HASAD) Project in Lebanon; PCR 2019.

[64] National Agriculture Project (NAP), Eritrea

[65] Demographic projection from the National Institute of Statistics (INE), 2022 Estimates.

[66] In the selection of representatives, particular attention will be paid to avoid the risk of focusing exclusively on already well-organized groups of aquaculture or fishing communities or on successful women and young entrepreneurs. The project will therefore adopt measures to build the capacity and confidence of those with little or no voices and enable them to participate more actively in planning and decision-making in the governance of the different AFAP-2 interventions (artisanal fisheries and aquaculture value chains) to be supported by the project.

[67] UN-Committee on the Rights of Persons with Disabilities-ANGOLA, 2023

(Lien: <https://www.ungeneva.org/fr/news-media/meeting-summary/2023/03/experts-committee-rights-persons-disabilities-commend-angola>)

[68] AFAP PCR and AFAP PCN Reports

[69] AFAP Project Completion Report

[70] Situational Analysis of Inland Fisheries and Small-Scale Aquaculture in the Republic of Angola 2023.

[71] AFAP Project Completion Report

[72] AFAP: Market Study on the Supply and Demand of Continental Fish and Small-Scale Aquaculture, December 2019

[73] SREP is being implemented in 7 provinces, 3 (Bengo, Cuanza Norte and Uige) of which are targeted for AFAP-2.

Angola

Artisanal Fisheries and Aquaculture Project Phase 2

Project Design Report

Annex 1: Logframe

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

Artisanal Fisheries and Aquaculture Project Phase 2

Logical Framework

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Outreach Persons receiving services promoted or supported by the project	1 Persons receiving services promoted or supported by the project				Primary data collected through the project M&E system and Progress reports	Annual	PMU	The project's planned activities are executed as intended. Notably, the youth and women, who constitute the primary target group, demonstrate significant interest and capability to actively participate and contribute to the fish value chain.
	Males	0	9300	18600				
	Females	0	6200	12400				
	Young	0	4650	9300				
	Not Young							
	Non-Indigenous people							
	Total number of persons receiving services	0	15500	31000				
	Persons with disabilities	0	775	1550				
	1.b Estimated corresponding total number of households members				Primary data collected through the project M&E system and Progress reports	Annual	PMU	
	Household members	0	74000	148000				
1.a Corresponding number of households reached				Primary data collected through the project M&E system and Progress reports	Annual	PMU		
Households	0	15500	31000					
Project Goal Contribute to improved household income, food and nutrition security through sustainable and climate resilient fisheries and aquaculture	Average income per household in the targeted areas				Baseline, MTR , Endline survey, progress reports	Y1, Y3, Y6	PMU	A conducive environment for climate resilient and fish value chain sector
	Percentage of HHs reporting increased incomes		35	70				
	Prevalence of food insecurity reduced - Percentage (%)				Baseline, MTR , Endline survey, progress reports	Y1, Y3, Y6	PMU	
	Percentage (%)	31	35	40				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Development Objective Contribute to the reduction of rural poverty and food insecurity of smallholders in the target provinces by developing their economic potential while improving natural resources management capacity and resilience to climate change	IE.2.1 Individuals demonstrating an improvement in empowerment				COI Surveys	Baseline, Midline and endline survey	PMU	There is capacity in the implementing agency and partners to deliver the proposed outputs. There is interest and capability of women and youth, and institutions to actively participate, adopt and contribute to activities
	Total persons	0	30	60				
	Total persons	0	9362	18724				
	Females	0	22	44				
	Females	0	4154	8308				
	Males	0	28	56				
	Males	0	5208	10416				
	1.2.9 Households with improved nutrition Knowledge Attitudes and Practices (KAP)				COI Surveys	Baseline, Midline and endline survey	PMU	
	Households (number)	0	3685	7370				
	Households (%)	0	33.5	67				
	Household members	0	17688	35376				
	3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices				COI Surveys	Baseline, Midline and endline survey	PMU	
	Total number of household members	0	3075	6150				
	Households	0	30	60				
	Households	0	14668	29336				
	SF.2.1 Households satisfied with project-supported services				COI survey	Baseline, Midline and endline survey	PMU	
Household members	0	44640	89280					
Households (%)	0	30	60					
Households (number)	0	9300	18600					
Outcome Outcome 1 Improved and resilient inland fisheries and small-scale aquaculture production contributing to increased rural incomes	Households reporting Increased fish catches per annum per commodity for VC developed				Progress Reports	Annual	PMU	Participation of women and youth in the value chain.
	Percentage (%) - Artisanal fisheries (HH)	0	10	20				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	Percentage (%) - Business Enterprises (HH)	0	5	10				
	Percentage (%) - Aquaculture (HH)	0	5	10				
	Percentage (%) - Value chain (HH)	0	25	50				
	Percentage increase in overall production of small-scale aquaculture operations due to improved management practices, better technologies, and access to resources				Baseline, MTR , Endline survey, progress reports	Annual	PMU	
	Tons/year/pond	0.9	1.35	1.8				
	Percentage (%)	6.7	10	20				
	Pond productivity (kg/sq m)	1.7	2.5	5				
	1.2.4 Households reporting an increase in production				COI survey	COI survey at Baseline , Midterm and Completion	PMU	
	Total number of household members		20451	40903				
	Households		35	70				
	Households		4288	8575				
	1.2.2 Households reporting adoption of new/improved inputs, technologies or practices				COI survey	COI survey at Baseline , Midterm and Completion	PMU	
	Total number of household members	0	16695	33390				
	Households	0	35	70				
	Households	0	3500	7000				
	Percentage increase in the overall fish and fish species produced and harvested from artisanal fisheries activities (lagoons).				Progress Report	Annual	PMU	
	Catch Per Unit Effort (kg/day/boat)	30	45	60				
	Percentage of Catch Per Unit Effort (kg/day/boat) (%)	50	75	100				
	Species – Number	3	5	6				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	Species – Percentage (%)	50	83	100				
	Percentage of households reporting Increase fish Processed per annum				Progress Reports	Annual	PMU	
	Households - Number	7750	11625	15500				
	Households - Percent (%)	25	38	50				
	1.2.8 Women reporting minimum dietary diversity (MDDW)							
	Women (%)	0	50	51				
	Women (number)		3100	6200				
	Households (%)		50	51				
	Households (number)		7750	15500				
	Household members		37000	74000				
	Indigenous		775	1550				
	Non-indigenous							
	Women-headed households		3100	6200				
	Non-women-headed households							
Output Output 1.1 Establishment of effective inland fisheries management systems	3.1.1 Groups supported to sustainably manage natural resources and climate-related risks				Progress Reports, Survey; M&E system	Annual	PMU	The legal framework for inland fisheries management system exists and updated
	Total size of groups	0	10125	20250				
	Groups supported	0	118	235				
	Males	0	6075	12150				
	Females	0	4050	8100				
	Young	0	3038	6075				
	Persons with disabilities	0	506	1013				
	Number of Indigenous fishing practices supported				Progress Reports, Survey; M&E system	Annual	PMU	
...	0	5	10					

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Output Output 1.2 Enhanced resilient business-oriented small-scale aquaculture production & distribution capacities, and extension services	1.1.3 Rural producers accessing production inputs and/or technological packages				Progress Reports, Survey; M&E system	Annual	PMU	
	Males	0	3000	6000				
	Females	0	2000	4000				
	Young	0	1500	3000				
	Total rural producers	0	5000	10000				
	Persons with disabilities	0	250	500				
	1.1.4 Persons trained in production practices and/or technologies				Progress Reports, Survey; M&E system	Annual	PMU	
	Total number of attendances to training sessions	0	6125	12250				
	Men trained in fishery	0	3675	7350				
	Women trained in fishery	0	2450	4900				
	Young people trained in fishery	0	1838	3675				
	Total persons trained in fishery	0	6125	12250				
	Persons with disabilities trained in fishery	0	100	200				
	2.1.3 Rural producers' organizations supported							
	Total size of POs	0	1000	2000				
	Rural POs supported	0	200	400				
	Males	0	600	1200				
	Females	0	400	800				
	Young	0	0	300				
	Rural POs supported that are headed by women	0	80	160				
Persons with disabilities	0	50	100					

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
	1.1.8 Households provided with targeted support to improve their nutrition							
	Total persons participating	0	7750	11000				
	Males	0	4650	6600				
	Females	0	3100	4400				
	Households	0	7750	11000				
	Household members benefitted	0	37200	52800				
	Young	0	2325	3300				
	Number of persons with disabilities	0	385	550				
Output Output 1.3 Establishment of inland fisheries and aquaculture extension system	Number of government staff trained by the project in aquaculture and fisheries extension services				Progress Reports, Survey; M&E	Annual	PMU	MINPERMAR is committed to enhancing extension service for inland fisheries and aquaculture
	...	0	12	25				
Outcome Outcome 2 Strengthened fisheries and aquaculture market linkages, entrepreneurships and infrastructure providing services	2.2.2 Supported rural enterprises reporting an increase in profit				COI Surveys	Baseline, Midline and endline survey	PMU	The Government, private sector, and smallholders have capacity to promote inland fish value chain and entrepreneurship
	Number of enterprises	0	55	110				
	Percentage of enterprises	0	10	20				
	2.2.1 Persons with new jobs/employment opportunities				COI survey	Baseline, Midline and endline survey	PMU	
	Males	0	750	1500				
	Females	0	750	1500				
	Young	0	450	900				
	Total number of persons with new jobs/employment opportunities	0	1500	3000				
	Persons with disabilities	0	75	150				

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Output Output 2.1 Development of aquaculture and inland fisheries market-linked enterprises.	2.1.2 Persons trained in income-generating activities or business management				Progress reports, Survey; M&E system	Annual	PMU	Target community including women and youth are interested in fish enterprise
	Males	0	5175	10350				
	Females	0	3450	6900				
	Young	0	2588	5175				
	Persons trained in IGAs or BM (total)	0	8625	17250				
	Persons with disabilities	0	4313	8625				
Output Output 2.2 Established market & value addition infrastructure & improved market access	2.1.6 Market, processing or storage facilities constructed or rehabilitated				Progress reports, Survey; M&E system	Annual	PMU	Participation of women and youth in the value chain.
	Total number of facilities	0	41	87				
	Market facilities constructed/rehabilitated	0	1	2				
	Storage facilities constructed/rehabilitated	0	40	85				
	2.1.5 Roads constructed, rehabilitated or upgraded				Progress reports, Survey; M&E system	Annual	PMU	
	Length of roads	0	250	500				
	Outcome Outcome 3 Strengthened institutions and policies for a sustainable and inclusive inland fisheries sector	Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment				Relevant legal in-country institutions or through qualitative surveys	Baseline, Midline and endline survey	PMU
Number			1	2				
SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers				COI Surveys	Baseline, Midline and endline survey	PMU		
Household members		0	44640				89280	
Households (%)		0	30				60	
Households (number)		0	9300				18600	

Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Output Output 3.1 Capacity building material, training and policy engagement enhanced	Policy 1 Policy-relevant knowledge products completed				Relevant legal in-country institutions or through qualitative surveys	Annual	PMU	Public interest exist in promoting evidence based policy
	Number	0	1	2				

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 Project Design Report

Annex 2: Theory of change

Mission Dates: 27/11/2023 - 10/01/2024

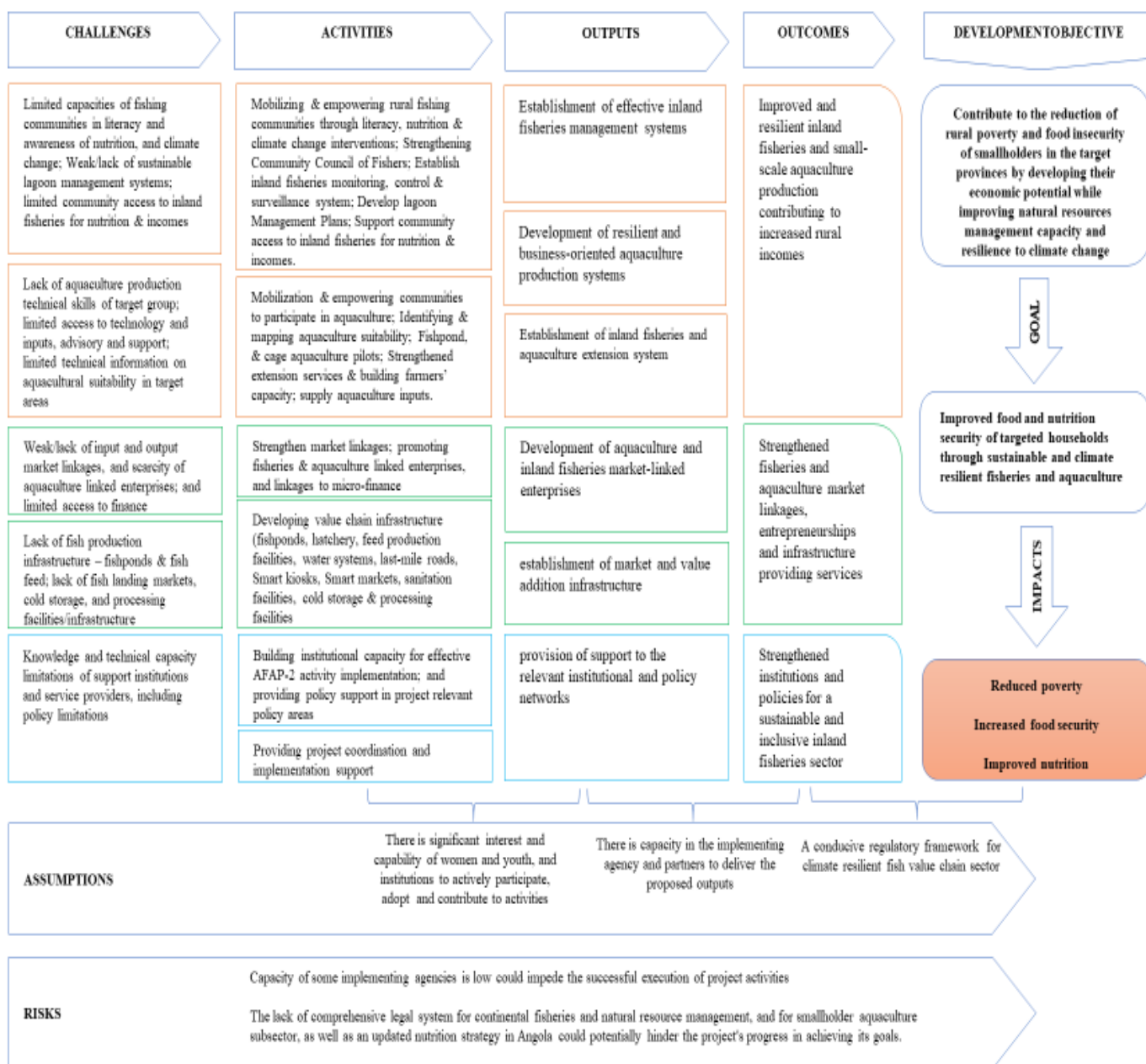
Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

Annex 3: Theory of Change



Angola

Artisanal Fisheries and Aquaculture Project Phase 2

Project Design Report

Annex 3: Project cost and financing: Detailed costs tables

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

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Annex 3: Project Cost and Financing

1. **Main Assumptions** – This Annex presents the analysis of costs and financing for the Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2) in Angola. It describes the assumptions made in estimating the project costs including the detailed cost tables and financing plan. The analysis used the COSTAB software to display the financial data and the detailed cost tables for each component. The cost tables have been consolidated into summary tables that present the costs by component, category of expenditure and financiers. The full set of detailed and summary tables is presented at the end of this Annex.
2. The project is proposed to be financed over a eight-year period (2025-2032). The information collected during the design mission (December 2023) provided the key parameters for the costs. Project costs have been computed based on the available information about the project structure and its planned activities.
3. **National economy status and growth.** According to the World Bank¹, in the first quarter of 2023, the economy expanded 0.3% year-on-year as growth in services (4.1%) was offset by a decline in oil production (-8.0 %). Between mid-May and end-June 2023, the kwanza depreciated around 40% against the US dollar due to lower government supply of foreign currency, resulting from lower oil revenues. Growth for 2023 is estimated at 1.3%, as both the oil and the non-oil sectors are expected to underperform.
4. **Inflation rate.** The partial removal of gasoline subsidies and the weakening of the kwanza have reversed the inflation’s declining trend. The inflation rate in Angola has increased in the past year, from 11.54% in February 2023 to almost 22% in January 2024. However, the Central Bank has the goal to put the current inflation rate below the present figure to stabilize the country's economy and prices to a rate of 12-14%. Therefore, a local inflation rate of 13% was set as a base for the analysis for the year 2025. Subsequently, the rate is set at 12.5% for 2026, and 12% for the remaining period 2027-2032. Foreign inflation rate has been preliminary set at 1% for the same period. Both local and foreign inflation rates are compounded at mid-year. Inflation figures used in the calculation of the Programme costs are shown in Table 1.

Table 1: Inflation Rates (%)

Inflation Rates (%)	2025	2026	2027	2028	2029	2030	2031	2032
Annual								
Local	13.5	12.5	12.0	12.0	12.0	12.0	12.0	12.0
Foreign	3.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Compound								
Local	6.7	20.6	35.3	51.6	69.8	90.2	113.0	138.5
Foreign	1.8	5.1	8.2	11.5	14.8	18.2	21.8	25.4

5. **Exchange Rate.** The Angolan Kwanza (AOA) has been steadily devaluated over the period January 2012-2024, from 96 to 828 AOA/US\$. The project costs are presented in both AOA and US\$. The exchange rate has been set at AOA 829 to US\$ 1 as the exchange rate

¹ See <https://www.worldbank.org/en/country/angola/overview>, updated Sept 24, 2023

prevailing at design. Conversions from current US\$ values into AOA use the constant purchasing power parity (CPPP) exchange rates reported in Table 2.

Table 2: Constant Purchasing Power Parity (CPPP) Exchange Rates

Exchange Rate	Up to negotiation	Up to Project start-up	2025	2026	2027	2028	2029	2030	2031	2032
AOA to US\$	829.0	829.0	869.7	951.6	1,037.0	1,127.6	1,226.1	1,333.2	1,449.7	1,576.4

6. **Taxes and duties.** Excise taxes and value added tax (VAT) are imposed to costs of all transactions where appropriate. A VAT of 14% is levied on all imported and locally procured goods and services. No goods and services with VAT positive rates other than standard exist. In addition to VAT, excise taxes and custom duties are imposed on imports. Some products and services are exempt from VAT. These include financial services, educational services, and healthcare and transportation services. International technical assistance and allowances do not carry any taxes. Taxes and duties applied in Project costing – displayed by expenditure categories – are summarized in Table 3.

Table 3: Taxes, duties, and foreign exchange by expenditure category

Expenditure category	% Taxes	% Foreign exchange	% Duty/Taxes
<i>I. Investment Costs</i>			
A. Consultancies	0	30	0
B. Equipment, materials, goods and services	14	50	0
C. Works	14	50	0
D. Vehicles	64	100	70
E. Training & Workshops	14	0	0
G. Grants & subsidies	0	50	0
H. Credit and guarantee funds	0	50	0
I. Unallocated	0	0	0
<i>II. Recurrent Costs</i>			
A. Operating costs	14	0	0
B. Salaries & allowances	0	11	0

7. **Project Costs.** Total project costs are set at US\$ 90.0 million over the eight-year project implementation period. A summary breakdown of the project costs by component is shown in Table 4.

Table 4: Project costs by component and sub-component

(Kwanza '000) (US\$ '000)

	Total	Total
A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems		
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	8,105,133	9,777
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	12,928,918	15,596
Subtotal	21,034,051	25,373
B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development		
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	18,440,856	22,245
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	12,582,562	15,178
Subtotal	31,023,418	37,423
C. Component 3: Institutional Strengthening, Policy Support and Project Management		
1. Sub-component 3.1: Institutional Strengthening and Policy Support	2,588,337	3,122
2. Sub-component 3.2: Project Management	13,423,334	16,192
Subtotal	16,011,671	19,314
Total BASELINE COSTS	68,069,140	82,110
Physical Contingencies	1,177,338	1,420
Price Contingencies	24,842,738	6,470
Total PROJECT COSTS	94,089,216	90,000

8. **Project Financing.** The project will be financed through the contributions from the following financiers: (i) IFAD12 PBAS, with a loan of US\$42.78 million; (ii) IFAD12 BRAM, with a loan of US\$15.0 million; (iii) the European Union (EU), with a loan of US\$10.0 million.
9. Domestic co-financing will include: (i) the Government (GOA), which will contribute both in-cash (with about US\$ 6.44 million through waived duties and taxes deposited to the government counterpart account at project level), and in-kind (with about US\$ 2.78 million through office space for the PMU at central and provincial level, and contribution to salaries of the extension workers); (ii) private sector (enterprises, and other private entities), with an expected contribution of about US\$ 8.04 million (in-kind through loans from the financial institutions, but not to be disbursed to project account); and (iii) beneficiaries, who are expected to provide about US\$ 4.96 million (through in-kind contributions).
10. The proposed financing plan is summarized in Table 5.
11. **Project sustainability.** Most project costs will be represented by investment costs. Therefore, post-project sustainability is not considered at risk. Also, the project is expected to increase climate resilience of smallholder producers, therefore it is expected that they will be able to manage future climate risk. Furthermore, the project will invest in facilitating productive private investments along the value chains and to continue and expand the effectiveness of current IFAD investments through expanded agriculture productivity, production, and increased value added to production.

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Table 5: Project costs by component and financier

Inland Fisheries and Aquaculture Project-Phase 2 (AFAP-2)																			
Components by Financiers																			
(\$ '000)																			
	IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Beneficiaries (in-kind)		Private Sector (in-kind)		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems																			
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	3 827	35.2	860	7.9	4 839	44.5	746	6.9	604	5.6	-	-	-	-	10 876	12.1	1 451	8 679	746
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	8 038	46.0	99	0.6	2 070	11.8	2 316	13.2	-	-	4 956	28.4	-	-	17 478	19.4	7 855	7 308	2 316
Subtotal	11 865	41.8	959	3.4	6 908	24.4	3 062	10.8	604	2.1	4 956	17.5	-	-	28 354	31.5	9 305	15 987	3 062
Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development																			
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	9 811	43.2	7 653	33.7	870	3.8	4	-	-	-	-	-	4 380	19.3	22 719	25.2	10 367	12 347	4
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	9 119	53.0	2 143	12.4	-	-	2 288	13.3	-	-	-	-	3 663	21.3	17 213	19.1	8 432	6 493	2 288
Subtotal	18 930	47.4	9 796	24.5	870	2.2	2 292	5.7	-	-	-	-	8 043	20.1	39 931	44.4	18 799	18 840	2 292
Component 3: Institutional Strengthening, Policy Support and Project Management																			
1. Sub-component 3.1: Institutional Strengthening and Policy Support	1 479	42.9	357	10.3	1 325	38.4	289	8.4	-	-	-	-	-	-	3 450	3.8	551	2 610	289
2. Sub-component 3.2: Project Management	10 506	57.5	3 888	21.3	896	4.9	798	4.4	2 176	11.9	-	-	-	-	18 264	20.3	1 423	15 738	1 103
Subtotal	11 985	55.2	4 245	19.5	2 221	10.2	1 087	5.0	2 176	10.0	-	-	-	-	21 714	24.1	1 975	18 348	1 391
Total PROJECT COSTS	42 780	47.5	15 000	16.7	10 000	11.1	6 441	7.2	2 780	3.1	4 956	5.5	8 043	8.9	90 000	100.0	30 079	53 175	6 746

Summary Cost Tables

A1	Components Programme Cost Summary, by Year
A2	Cost Summary by Expenditure Category
A3	Expenditure Accounts by Components
A4	Expenditure Accounts by Financiers
A5	Local/Foreign/Taxes by Financiers
A6	Programme Components by Year – Investment/Recurrent costs
A7	Expenditure Accounts by Year

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Table A1

Angola									
Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2)									
Project Components by Year – Totals Including Contingencies									
(US\$ '000)									
	Totals Including Contingencies								
	2025	2026	2027	2028	2029	2030	2031	2032	Total
A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems									
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	887	2,054	1,903	2,234	1,462	1,258	584	494	10,876
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	132	7,541	8,098	665	397	409	117	120	17,478
Subtotal	1,019	9,595	10,000	2,899	1,859	1,667	701	615	28,354
B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development									
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	179	8,080	6,762	4,627	1,233	799	517	520	22,719
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	98	6,681	6,052	2,459	1,014	672	117	120	17,213
Subtotal	277	14,761	12,814	7,086	2,248	1,471	634	641	39,931
C. Component 3: Institutional Strengthening, Policy Support and Project Management									
1. Sub-component 3.1: Institutional Strengthening and Policy Support	266	597	655	767	629	461	37	38	3,450
2. Sub-component 3.2: Project Management	2,537	2,313	1,933	2,186	2,349	2,278	2,310	2,359	18,264
Subtotal	2,803	2,910	2,588	2,953	2,979	2,739	2,346	2,396	21,714
Total PROJECT COSTS	4,099	27,265	25,402	12,938	7,085	5,877	3,681	3,652	90,000

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Table A2

Angola										
Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2)										
Expenditure Accounts Project Cost Summary										
	(Kwanza '000)					(US\$ '000)				
	Local	Foreign	Total	% Foreign Exchange	% Total Base Costs	Local	Foreign	Total	% Foreign Exchange	% Total Base Costs
I. Investment Costs										
A. Works	4,828,925	4,828,925	9,657,850	50	14	5,825	5,825	11,650	50	14
B. Unallocated	306,730	-	306,730	-	-	370	-	370	-	-
C. Vehicles	231,291	154,194	385,485	40	1	279	186	465	40	1
D. Equipment, material, goods and services	7,234,807	7,234,807	14,469,615	50	21	8,727	8,727	17,454	50	21
E. Consultancies	7,633,059	3,356,580	10,989,639	31	16	9,208	4,049	13,257	31	16
F. Training and workshops	5,840,089	53,885	5,893,974	1	9	7,045	65	7,110	1	9
G. Grants and subsidies	5,564,745	5,564,745	11,129,491	50	16	6,713	6,713	13,425	50	16
H. Credit and guarantee funds	1,815,510	1,815,510	3,631,020	50	5	2,190	2,190	4,380	50	5
Total Investment Costs	33,455,157	23,008,646	56,463,803	41	83	40,356	27,755	68,111	41	83
II. Recurrent Costs										
A. Salaries and allowances	7,640,064	-	7,640,064	-	11	9,216	-	9,216	-	11
B. Operating Costs	3,965,273	-	3,965,273	-	6	4,783	-	4,783	-	6
Total Recurrent Costs	11,605,337	-	11,605,337	-	17	13,999	-	13,999	-	17
Total BASELINE COSTS	45,060,494	23,008,646	68,069,140	34	100	54,355	27,755	82,110	34	100
Physical Contingencies	588,669	588,669	1,177,338	50	2	710	710	1,420	50	2
Price Contingencies	18,887,004	5,955,734	24,842,738	24	36	4,855	1,615	6,470	25	8
Total PROJECT COSTS	64,536,167	29,553,049	94,089,216	31	138	59,921	30,079	90,000	33	110

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Table A3

Angola Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2) Expenditure Accounts by Components - Totals Including Contingencies (US\$ '000)								
	Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems		Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development		Component 3: Institutional Strengthening, Policy Support and Project Management			
	Sub-component		Sub-component		Sub-component			
	1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	3.1: Institutional Strengthening and Policy Support	Sub-component 3.2: Project Management	Total	
I. Investment Costs								
A. Works	-	-	-	13,099	-	102	13,201	
B. Unallocated	-	-	-	-	-	389	389	
C. Vehicles	-	-	-	-	-	493	493	
D. Equipment, material, goods and services	554	15,147	-	3,243	269	363	19,576	
E. Consultancies	3,913	937	4,882	870	1,389	2,806	14,798	
F. Training and workshops	4,600	1,394	-	-	1,541	334	7,870	
G. Grants and subsidies	-	-	13,425	-	-	-	13,425	
H. Credit and guarantee funds	-	-	4,380	-	-	-	4,380	
Total Investment Costs	9,067	17,478	22,687	17,213	3,200	4,487	74,132	
II. Recurrent Costs								
A. Salaries and allowances	1,632	-	-	-	-	8,813	10,445	
B. Operating Costs	177	-	32	-	251	4,963	5,423	
Total Recurrent Costs	1,809	-	32	-	251	13,777	15,868	
Total PROJECT COSTS	10,876	17,478	22,719	17,213	3,450	18,264	90,000	
Taxes	746	2,316	4	2,288	289	1,103	6,746	
Foreign Exchange	1,451	7,855	10,367	8,432	551	1,423	30,079	

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Table A4

Angola																				
Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP)																				
Expenditure Accounts by Financiers																				
(US\$ '000)																				
	IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Beneficiaries (in-kind)		Private Sector (in-kind)		Total		For.	Local	Duties &	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	(Excl. Taxes)	Taxes	
I. Investment Costs																				
A. Works	6 964	52.8	1 561	11.8	-	-	1 848	14.0	-	-	-	-	2 827	21.4	13 201	14.7	6 600	4 752	1 848	
B. Unallocated	389	100.0	-	-	-	-	-	-	-	-	-	-	-	-	389	0.4	-	389	-	
C. Vehicles	124	25.2	73	14.8	-	-	296	60.0	-	-	-	-	-	-	493	0.5	197	-	296	
D. Equipment, material, goods and services	10 196	52.1	848	4.3	-	-	2 741	14.0	-	-	4 956	25.3	836	4.3	19 576	21.8	9 788	7 048	2 741	
E. Consultancies	9 050	61.2	3 124	21.1	2 624	17.7	0	-	-	-	-	-	-	-	14 798	16.4	4 521	10 277	-	
F. Training and workshops	122	1.5	45	0.6	6 601	83.9	1 102	14.0	-	-	-	-	-	-	7 870	8.7	70	6 698	1 102	
G. Grants and subsidies	6 981	52.0	6 444	48.0	-	-	-	-	-	-	-	-	-	-	13 425	14.9	6 713	6 713	-	
H. Credit and guarantee funds	-	-	-	-	-	-	-	-	-	-	-	-	4 380	100.0	4 380	4.9	2 190	2 190	-	
Total Investment Costs	33 827	45.6	12 096	16.3	9 225	12.4	5 987	8.1	-	-	4 956	6.7	8 043	10.8	74 132	82.4	30 079	38 066	5 987	
II. Recurrent Costs																				
A. Salaries and allowances	6 809	65.2	2 257	21.6	775	7.4	-	-	604	5.8	-	-	-	-	10 445	11.6	-	10 445	-	
B. Operating Costs	2 145	39.6	647	11.9	-	-	455	8.4	2 176	40.1	-	-	-	-	5 423	6.0	-	4 663	759	
Total Recurrent Costs	8 179	51.5	2 904	18.3	775	4.9	455	2.9	2 780	17.5	-	-	-	-	15 868	17.6	-	15 109	759	
Total PROJECT COSTS	42 780	47.5	15 000	16.7	10 000	11.1	6 441	7.2	2 780	3.1	4 956	5.5	8 043	8.9	90 000	100.0	30 079	53 175	6 746	

Table A5

Angola																			
Artisanal Fisheries and Aquaculture P																			
Local/Foreign/Taxes by Financiers																			
(US\$ '000)																			
	IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Beneficiaries (in-kind)		Private Sector (in-kind)		Total				
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
I. Foreign	16 366	54.4	5 655	18.8	857	2.8	-	-	-	-	2 881	9.6	4 320	14.4	30 079	33.4			
II. Local (Excl. Taxes)	26 414	49.7	9 345	17.6	9 143	17.2	-	-	2 475	4.7	2 074	3.9	3 723	7.0	53 175	59.1			
III. Taxes	-	-	-	-	-	-	6 441	95.5	305	4.5	-	-	-	-	6 746	7.5			
Total Project	42 780	47.5	15 000	16.7	10 000	11.1	6 441	7.2	2 780	3.1	4 956	5.5	8 043	8.9	90 000	100.0			

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Table A6

Totals Including Contingencies									
	2025	2026	2027	2028	2029	2030	2031	2032	Total
Angola									
Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2)									
Project Components by Year -- Investment/Recurrent Costs									
(US\$ '000)									
A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems									
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem									
Investment Costs	704	1,842	1,684	2,009	1,230	1,019	338	241	9,067
Recurrent Costs	183	212	219	225	232	239	246	253	1,809
Subtotal	887	2,054	1,903	2,234	1,462	1,258	584	494	10,876
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production									
Investment Costs	132	7,541	8,098	665	397	409	117	120	17,478
Recurrent Costs	-	-	-	-	-	-	-	-	-
Subtotal	132	7,541	8,098	665	397	409	117	120	17,478
Subtotal	1,019	9,595	10,000	2,899	1,859	1,667	701	615	28,354
B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development									
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries									
Investment Costs	179	8,049	6,762	4,627	1,233	799	517	520	22,687
Recurrent Costs	-	32	-	-	-	-	-	-	32
Subtotal	179	8,080	6,762	4,627	1,233	799	517	520	22,719
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment									
Investment Costs	98	6,681	6,052	2,459	1,014	672	117	120	17,213
Recurrent Costs	-	-	-	-	-	-	-	-	-
Subtotal	98	6,681	6,052	2,459	1,014	672	117	120	17,213
Subtotal	277	14,761	12,814	7,086	2,248	1,471	634	641	39,931
C. Component 3: Institutional Strengthening, Policy Support and Project Management									
1. Sub-component 3.1: Institutional Strengthening and Policy Support									
Investment Costs	241	571	628	739	595	426	-	-	3,200
Recurrent Costs	25	26	27	28	34	35	37	38	251
Subtotal	266	597	655	767	629	461	37	38	3,450
2. Sub-component 3.2: Project Management									
Investment Costs	991	716	289	493	605	481	459	453	4,487
Recurrent Costs	1,546	1,596	1,644	1,693	1,744	1,797	1,850	1,906	13,777
Subtotal	2,537	2,313	1,933	2,186	2,349	2,278	2,310	2,359	18,264
Subtotal	2,803	2,910	2,588	2,953	2,979	2,739	2,346	2,396	21,714
Total PROJECT COSTS	4,099	27,265	25,402	12,938	7,085	5,877	3,681	3,652	90,000
Total Investment Costs	2,344	25,399	23,513	10,992	5,075	3,807	1,548	1,455	74,132
Total Recurrent Costs	1,755	1,866	1,890	1,946	2,010	2,071	2,133	2,197	15,868

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Table A7

Angola Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2) Expenditure Accounts by Years – Totals Including Contingencies (US\$ '000)									
	Totals Including Contingencies								
	2025	2026	2027	2028	2029	2030	2031	2032	Total
I. Investment Costs									
A. Works	102	5,515	4,658	1,463	904	559	-	-	13,201
B. Unallocated	-	389	-	-	-	-	-	-	389
C. Vehicles	315	-	-	-	178	-	-	-	493
D. Equipment, material, goods and services	470	8,414	9,094	1,292	173	83	41	10	19,576
E. Consultancies	1,113	2,570	2,290	2,909	2,282	1,624	1,092	917	14,798
F. Training and workshops	344	1,406	1,651	2,048	1,138	1,141	15	128	7,870
G. Grants and subsidies	-	6,405	4,720	2,300	-	-	-	-	13,425
H. Credit and guarantee funds	-	700	1,100	980	400	400	400	400	4,380
Total Investment Costs	2,344	25,399	23,513	10,992	5,075	3,807	1,548	1,455	74,132
II. Recurrent Costs									
A. Salaries and allowances	1,172	1,210	1,247	1,284	1,322	1,362	1,403	1,445	10,445
B. Operating Costs	582	656	643	662	688	709	730	752	5,423
Total Recurrent Costs	1,755	1,866	1,890	1,946	2,010	2,071	2,133	2,197	15,868
Total PROJECT COSTS	4,099	27,265	25,402	12,938	7,085	5,877	3,681	3,652	90,000

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.Detailed Cost Tables

DT1	Table 1.1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem
DT2	Table 1.2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production
DT3	Table 2.1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries
DT4	Table 2.2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment
DT5	Table 3.1. Sub-component 3.1: Institutional Strengthening and Policy Support
DT6	Table 3.2. Sub-component 3.2: Project Management

DT1. Table 1.1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem

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Unit	Quantities												Total	Unit Cost (US\$)		Base Cost (US\$ '000)							Total
	2025	2026	2027	2028	2029	2030	2031	2032	2025	2026	2027	2028		2029	2030	2031	2032						
I. Investment Costs																							
A. Effective inland fisheries management																							
1. Participatory Fisheries Management																							
Establishment of new Community Council of Fisheries (CCPs) in project provinces /a																							
Regular training for CCPs /b	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2					
Number of workshops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Subtotal	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10					
2. Effective Inland Fisheries Surveillance System Established																							
Purchase and distribution of equipment and tools for CCPs /c																							
Training and capacity building on effective surveillance system /d	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Number of workshops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Subtotal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
3. Development of Participatory Inland Fisheries Data and Monitoring System																							
Training and capacity building of CCPs on data collection, recording and reporting /e																							
Procurement and distribution of data collection and reporting materials /f																							
Feasibility assessments/baseline surveys for targeted lagoons	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Subtotal	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60					
4. Development of Lagoon Management Plan /g																							
Training and capacity building on sustainable fishing methods /h																							
Procurement of sustainable fishing nets /i																							
Number of workshops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Subtotal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
5. Enhanced community access to inland fisheries for nutrition and incomes																							
Training and capacity building on sustainable fishing methods /h																							
Procurement of sustainable fishing nets /i																							
Number of workshops	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Subtotal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
6. Fisheries specialist																							
Months	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12					
B. Targeting, gender, youth and social inclusion																							
1. Characterization of the main production basins for aquaculture and small-scale inland fisheries																							
Study	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
2. Services in aquaculture favourable to youth integration and people with disabilities /k																							
Study	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
3. Elaboration of targeting and social inclusion strategy /l																							
Study	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
4. Awareness and information campaign (non-media) about the project activities and the social inclusion strategy																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
5. Communication (mass media) on the project activities through tv, radio and audio broadcasts																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
6. Implementation of targeting and community mobilization actions																							
Study	1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
7. Support on targeting approaches, gender mainstreaming, social engineering and household approach (including GALS)																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
8. Strengthening/creating and implementing a community dialogue platform per province on the mobilization and inclusion of youth, women and for gender mainstreaming in the activities promoted by the project																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
9. Training on targeting approaches, gender mainstreaming, social engineering and household approach (including GALS)																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
10. Development and implementation of GALS approach																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
11. Institutional support for gender-sensitive review of aquaculture development policy documents and support for dissemination of GBV tools and other gender promotion documents																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
12. Implementation of the capacity building action plan for stakeholders on gender mainstreaming and support /m																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
13. Gender in curricula and other training materials																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
14. Functional literacy																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
15. Support for women's and girls' empowerment																							
Study	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
C. Improving household nutrition																							
1. Support for nutrition strategic management and database systems																							
Study	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
2. Promotion of good nutrition practices in communities																							
Study	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
3. Capacity building of local community agents in the prevention of chronic malnutrition (CM) and in the synergy between food security and nutrition																							
Study	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
4. Dissemination of good nutrition practices and nutrition micro-programmes																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
5. Promotion of food diversification micro-projects																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
6. Activity follow-up																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
D. Community Development, Social Inclusion and Nutrition Specialist																							
Months	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12					
II. Recurrent Costs																							
A. Salaries of extension workers /n																							
Months	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180					
B. Operating costs																							
Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
Months	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Subtotal																							
Months	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180					
Total Investment Costs																							
Months	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12					
Total Recurrent Costs																							
Months	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180					
Total																							
Months	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192	192					

a Establishment of 50 new CCPs in 5 provinces
b Regular capacity building of the 50 established and 10 existing CCPs. It consists of conducting regular training workshops for CCPs throughout the project
c Cost of surveillance equipment for 50 CCPs. It includes purchase of assorted tools and equipment to operationalize the activities of CCPs (Engine boats, Torches, Raincoats, Gumboots, Solar lamps, Walkie-talkies etc)
d Training modules to be given by FAO
e 1-week Workshop in Lualaba
f Books, pens, reporting templates etc
g Including frame surveys (FS), catchstock assessment surveys (CAS), and evaluating their capacity for cage aquaculture
h Gear exchange program in 20 lagoons
i Program in 20 river pools
j For 10,000 IHS
k It also includes a study on value chain characterization
l It also includes a youth, people with disabilities targeting and women's empowerment action plan
m For project staff and gender support institutions at provincial, municipal and community levels
n Short cycle adapted for youth and women
o Including functional literacy
p It includes CCPs, cooperatives, community associations, economic interest groups, etc.
q Establishment and feeding of a database of nutrition indicators in the project area
r Including through broadcasting TV, radio, audio, etc.
s On local innovative food technologies for products with high nutritional value integrated fish and on food hygiene and cooking diversified foods
t Covers salaries for 3 extension workers per province, for a total of 15 people. IFAD will pay 50% of the salaries. For Years 5&6, IFAD will pay 100% of the salaries. For Years 7&8, Government will pay 100% of the salaries.

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DT2. Table 1.2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production

	Unit	Quantities								Total	Unit Cost		Base Cost (US\$ '000)								Total
		2025	2026	2027	2028	2029	2030	2031	2032		(US\$)	2025	2026	2027	2028	2029	2030	2031	2032		
I. Investment Costs																					
A. Updating the existing aquaculture suitability map	Months	4	4	-	-	-	-	-	-	8	8,000	32	32	-	-	-	-	-	-	64	
B. Small-scale aquaculture production systems established and adopted																					
Construction of community-group ponds /a	Unit	-	3,000	3,000	-	-	-	-	-	6,000	2,000	-	6,000	6,000	-	-	-	-	-	12,000	
Construction and installation of fish cages /b	Unit	-	250	250	125	-	-	-	-	625	1,100	-	275	275	138	-	-	-	-	688	
Provision and installation of solar lights and automatic feeders in cages	Unit	-	250	250	125	-	-	-	-	625	800	-	200	200	100	-	-	-	-	500	
Procurement of seeds for fish-crop integrated system	Unit	12	12	12	12	-	-	-	-	48	100	1	1	1	1	-	-	-	-	5	
Construction of complete conical gardens	Number	-	-	200	-	-	-	-	-	200	800	-	-	160	-	-	-	-	-	160	
Procurement of ducks for fish-duck integration /c	Number	-	-	2,400	-	-	-	-	-	2,400	10	-	-	24	-	-	-	-	-	24	
Carbonized pond technology (CPT) using cassava peels	Number	-	-	200	-	-	-	-	-	200	250	-	-	50	-	-	-	-	-	50	
Farmers and extension officers trained and capacity enhanced on the established aquaculture production systems	Number of workshops	-	5	5	5	5	5	-	-	25	50,000	-	250	250	250	250	250	-	-	1,250	
Carbonized pond technology (CPT) using cassava peels	Number	-	-	200	-	-	-	-	-	200	250	-	-	50	-	-	-	-	-	50	
Purchase of boats for 25 cage aquaculture community groups	Number	-	-	25	-	-	-	-	-	25	1,500	-	-	38	-	-	-	-	-	38	
Subtotal												1	6,726	7,048	489	250	250	-	-	14,764	
C. Aquaculture specialist	Months	12	12	12	12	12	12	12	12	96	8,000	96	96	96	96	96	96	96	96	768	
Total												129	6,854	7,144	585	346	346	96	96	15,596	

^a The project will contribute through excavation, construction, and material. The beneficiaries will provide in-kind contribution (labour)

^b Beneficiary contribution will be in kind (labour)

^c Purchase 12 ducks every 50 ponds

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DT3. Table 2.1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries

	Unit	Quantities								Total	Unit Cost (US\$)	Base Cost (US\$ '000)								Total
		2025	2026	2027	2028	2029	2030	2031	2032			2025	2026	2027	2028	2029	2030	2031	2032	
I. Investment Costs																				
A. Establishment of 4P agreements																				
Technical support for structuring of 4P agreements	Lumpsum	-	1	-	-	-	-	-	-	1	40,000	-	40	-	-	-	-	-	40	
Evaluation of 4P proposals and business plans	Lumpsum	-	1	-	-	-	-	-	-	1	10,000	-	10	-	-	-	-	-	10	
Implementation of 4P agreements and business plans - Private sector	Lumpsum	-	1	1	1	-	-	-	-	3	500,000	-	500	500	500	-	-	-	1,500	
Subtotal													550	500	500	-	-	-	1,550	
B. Development of enterprises to operationalize smart kiosks																				
Technical support for development of business plans	Lumpsum	-	1	-	-	-	-	-	-	1	80,000	-	80	-	-	-	-	-	80	
Evaluation of business plans	Lumpsum	-	1	-	-	-	-	-	-	1	40,000	-	40	-	-	-	-	-	40	
Implementation of business plans - Private sector	Number	-	-	40	40	40	40	40	40	240	10,000	-	-	400	400	400	400	400	2,400	
Implementation of business plans - Grant	Number	-	24	24	-	-	-	-	-	48	10,000	-	240	240	-	-	-	-	480	
Subtotal													360	640	400	400	400	400	3,000	
C. Identification of private anchor producers																				
Technical support for structuring of 4P agreements	Lumpsum	-	1	-	-	-	-	-	-	1	40,000	-	40	-	-	-	-	-	40	
Evaluation of 4P proposals and business plans	Lumpsum	-	1	-	-	-	-	-	-	1	10,000	-	10	-	-	-	-	-	10	
Implementation of 4P agreements and business plans - Private sector	Number	-	5	5	2	-	-	-	-	12	40,000	-	200	200	80	-	-	-	480	
Subtotal													250	200	80	-	-	-	530	
D. Input subsidy to beneficiaries																				
Pond inputs for level 1 aquaculture farmers	Households	-	4,000	3,200	2,000	-	-	-	-	9,200	900	-	3,600	2,880	1,800	-	-	-	8,280	
Crop inputs for level 1 farmers	Households	-	5,000	5,000	-	-	-	-	-	10,000	100	-	500	500	-	-	-	-	1,000	
Pond inputs for level 2 aquaculture farmers	Households	-	1,600	1,000	-	-	-	-	-	2,600	900	-	1,440	900	-	-	-	-	2,340	
Inputs for inland fisherfolk	Households	-	2,500	-	2,500	-	-	-	-	5,000	150	-	375	-	375	-	-	-	750	
Inputs for cage farmers	Households	-	625	500	313	-	-	-	-	1,438	400	-	250	200	125	-	-	-	575	
Subtotal													6,165	4,480	2,300	-	-	-	12,945	
E. Business development services																				
Training of producers groups and cooperatives	Number	-	125	250	375	250	115	-	-	1,115	2,100	-	263	525	788	525	242	-	2,342	
Training of SMEs operating smart kiosks and market traders	Number	-	80	100	150	70	-	-	-	400	1,500	-	120	150	225	105	-	-	600	
Technical assistance to anchor producers	Number	-	5	10	10	-	-	-	-	25	10,000	-	50	100	100	-	-	-	250	
Support development of private sector investments	Lumpsum	-	1	-	-	-	-	-	-	1	100,000	-	100	-	-	-	-	-	100	
Subtotal													533	775	1,113	630	242	-	3,292	
F. Other technical assistance																				
Detailed value chain and market assessment	Study	1	-	-	-	-	-	-	-	1	80,000	80	-	-	-	-	-	-	80	
Development of private sector engagement strategy	Study	-	1	-	-	-	-	-	-	1	50,000	-	50	-	-	-	-	-	50	
Subtotal													80	50	-	-	-	-	130	
G. Business development specialist																				
	Months	12	12	12	12	12	12	12	12	96	8,000	176	8,004	6,691	4,489	1,126	738	496	22,215	
Total Investment Costs																				
II. Recurrent Costs																				
A. Calls of proposals - operating costs																				
Establishment of PPPP Agreements - call of proposal	Lumpsum	-	1	-	-	-	-	-	-	1	10,000	-	10	-	-	-	-	-	10	
Development of Enterprises to Operationalize Smart Kiosks - call of proposal	Lumpsum	-	1	-	-	-	-	-	-	1	10,000	-	10	-	-	-	-	-	10	
Identification of Private Anchor Producers - call of proposal	Lumpsum	-	1	-	-	-	-	-	-	1	10,000	-	10	-	-	-	-	-	10	
Subtotal													30	-	-	-	-	-	30	
Total													176	8,034	6,691	4,489	1,126	738	496	22,245

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DT4. Table 2.2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment

	Unit	Quantities								Total	Unit Cost (US\$)	Base Cost (US\$ '000)								Total	
		2025	2026	2027	2028	2029	2030	2031	2032			2025	2026	2027	2028	2029	2030	2031	2032		
I. Investment Costs																					
A. Construction works																					
Last-mile roads /a	Km	-	200	100	100	50	50	-	-	500	5,000	-	1,000	500	500	250	250	-	-	2,500	
First landing point of sale facilities /b	Number	-	10	10	5	-	-	-	-	25	50,000	-	500	500	250	-	-	-	-	1,250	
Water supply canal systems	Km	-	50	350	250	250	100	-	-	1,000	2,000	-	100	700	500	200	-	-	-	2,000	
Hatcheries facilities (Kamibafu) /c	Number	-	1	-	-	-	-	-	-	1	1,100,000	-	1,100	-	-	-	-	-	-	1,100	
Feed production facilities (Kamibafu) /d	Number	-	-	1	-	-	-	-	-	1	600,000	-	-	600	-	-	-	-	-	600	
Hatcheries facilities (Masangano) /e	Number	-	1	-	-	-	-	-	-	1	1,100,000	-	1,100	-	-	-	-	-	-	1,100	
Feed production facilities (Masangano) /f	Number	-	-	1	-	-	-	-	-	1	600,000	-	-	600	-	-	-	-	-	600	
Smart markets /g	Number	-	1	1	-	-	-	-	-	2	1,200,000	-	1,200	1,200	-	-	-	-	-	2,400	
Subtotal													5,000	4,100	1,250	750	450	-	-	11,550	
B. Equipment, material, goods and services																					
Smart kiosks	Number	-	20	28	37	-	-	-	-	85	20,000	-	400	560	740	-	-	-	-	1,700	
Wheelbarrow	Number	-	125	250	250	-	-	-	-	625	80	-	10	20	20	-	-	-	-	50	
Two-wheelers	Number	-	50	50	-	-	-	-	-	100	1,400	-	70	70	-	-	-	-	-	140	
Three-wheelers	Number	-	50	50	-	-	-	-	-	100	1,800	-	90	90	-	-	-	-	-	180	
Waste management for biogas and BSF for the smart markets /h	Number	-	1	1	-	-	-	-	-	2	395,000	-	395	395	-	-	-	-	-	790	
Subtotal													965	1,135	760	-	-	-	-	2,860	
C. Technical assistance																					
Infrastructure specialist	Months	12	12	12	12	12	12	12	12	96	8,000	96	96	96	96	96	96	96	96	768	
Total													96	6,061	5,331	2,106	846	546	96	96	15,178

a It includes: construction, gravelling, grading, camber and drainage. It is inclusive of the roads for leading to Masangano and Kimanbafu hatchery and feed facilities

b It includes: sheds, running water, sanitation (VIP), multi-functional areas, and micro-processing facilities

c For movable equipment that can be taken out at the end of the lease/ IFAD to help facilitate the funding access or provide business development service to support the development of the private sector investments

d For movable equipment that can be taken out at the end of the lease/ IFAD to help facilitate the funding access or provide business development service to support the development of the private sector investments

e For movable equipment that can be taken out at the end of the lease/ IFAD to help facilitate the funding access or provide business development service to support the development of the private sector investments

f For movable equipment that can be taken out at the end of the lease/ IFAD to help facilitate the funding access or provide business development service to support the development of the private sector investments

g Two markets will be built, in Dondo and Bengo

h For the smart markets in Dondo and Bengo

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DT5. Table 3.1. Sub-component 3.1: Institutional Strengthening and Policy Support

Unit	Quantities								Unit Cost (US\$)	Base Cost (US\$ '000)								Total
	2025	2026	2027	2028	2029	2030	2031	2032		2025	2026	2027	2028	2029	2030	2031	2032	
I. Investment Costs																		
A. Institutional Strengthening																		
Institutional capacity gap assessment and production of a capacity development plan																		
Build IPA capacity to coordinate and integrate inland fisheries and aquaculture extension /a																		
Capacity Strengthening of Government staff /b																		
Computer Support to National, Provincial and Municipal Staff for effective service delivery /c																		
Motorcycles for Logistical Support to the Provincial and Municipal Extension Agents /d																		
Implementation of other aspects of the capacity development plan																		
Staff training for both PMU and IPA staff - IFAD Clinics /e																		
BuildProc M1, M2 and M3 /f																		
Subtotal																		
B. Policy support																		
Formulation of inland fisheries/aquaculture extension strategy																		
Development & adoption of a community-based fisheries production and management policy																		
Establishment of policy guidelines for standardizing fish feed quality																		
Establishment and promotion of policy instrument attractive financial incentives for the sector																		
Establishment and promotion of policy instrument to facilitate the establishment of 4Ps																		
Establishment and promotion of policy instrument to facilitate access to credit and investment capital for SMEs in the sector																		
Subtotal																		
Total Investment Costs																		
II. Recurrent Costs																		
A. Operating costs																		
Motorcycle O&M /g																		
Motorcycle insurance																		
Total Recurrent Costs																		
Total																		

a Specificities will be identified by the systems and capacity needs assessment.
b At National, Province and Municipality Levels in Social Inclusion, Climate and Nutrition Aspects
c Desktop with softwares and antivirus; 3 per province and a total of 15 for the 5 provinces
d 10 motorcycles per province/municipality (3 per province and 7 for the municipalities in each province) for a total of 50 motorcycles.
e Trainer DSA/interpreter fee and lunch costs. 3-day training to be combined with implementation support missions.
f Training is free but in the third year (M3) includes cost of travel and DSA for partial in-campus session
g The unit cost is calculated as 10% of motorcycle cost price per motorcycle per year

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DT6. Table 3.2. Sub-component 3.2: Project Management

Unit	Quantities												Unit Cost (US\$)	Base Cost (US\$ '000)											
	2025	2026	2027	2028	2029	2030	2031	2032	Total	2025	2026	2027		2028	2029	2030	2031	2032	Total						
I. Investment Costs																									
A. Project Management Unit (PMU) - vehicles																									
Double Cabin Vehicles /a	Number	10	-	-	-	5	-	-	-	15	31,000	310	-	-	155	-	-	-	465						
Lumpsum	100	-	-	-	-	-	-	-	-	100	100,000	-	-	-	-	-	-	-	100						
B. Office Rehabilitation																									
Laptop /b	Number	15	-	-	-	-	-	-	-	15	2,000	30	-	-	-	-	-	-	30						
Desktop /c	Number	10	-	-	-	-	-	-	-	10	1,500	15	-	-	-	-	-	-	15						
Printer/Photocopier /d	Number	7	-	-	-	-	-	-	-	7	2,500	18	-	-	-	-	-	-	18						
Accounting software /e	Lumpsum	1	-	-	-	-	-	-	-	1	25,000	25	-	-	-	-	-	-	25						
Safe box /f	Number	6	-	-	-	-	-	-	-	6	2,000	12	-	-	-	-	-	-	12						
Projector /g	Number	6	-	-	-	-	-	-	-	6	2,000	12	-	-	-	-	-	-	12						
Video Conference Equipments /h	Set	6	-	-	-	-	-	-	-	6	2,500	15	-	-	-	-	-	-	15						
Server /i	Number	1	-	-	-	-	-	-	-	1	3,000	3	-	-	-	-	-	-	3						
Internet Network Equipment /j	Package	6	-	-	-	-	-	-	-	6	5,000	30	-	-	-	-	-	-	30						
Office furniture /k	Set	15	-	-	-	-	-	-	-	15	1,000	15	-	-	-	-	-	-	15						
Furniture for the Conference Room /l	Set	1	-	-	-	-	-	-	-	1	10,000	10	-	-	-	-	-	-	10						
Subtotal											185								185						
D. Audit																									
External audit	Number	1	1	1	1	1	1	1	1	8	40,000	40	40	40	40	40	40	40	320						
Internal audit	Number	1	1	1	1	1	1	1	1	8	5,000	5	5	5	5	5	5	5	40						
Subtotal											45	45	45	45	45	45	45	360							
E. Workshops																									
Stamp workshop /m	Number	5	-	-	-	1	-	-	-	5	10,000	50	-	-	-	-	-	-	50						
Annual planning & review workshop	Number	1	1	1	1	1	1	1	1	7	5,000	5	5	5	5	5	5	5	35						
PMU & Gov participation in workshops & SSSTC	Number	-	1	-	-	1	-	-	-	3	15,000	-	15	-	15	-	15	-	45						
Subtotal											55	55	5	20	5	20	5	130							
F. Monitoring & Evaluation																									
TA for M&E during implementation /n	Lumpsum	-	1	-	-	1	-	-	-	2	5,000	-	5	-	-	5	-	-	10						
M&E Workshop with project stakeholders to validate the M&E Manual, data collection and reporting tools	Number of workshops	1	-	-	-	-	-	-	-	1	2,500	3	-	-	-	-	-	-	3						
Tables for data collection by extension staff /o	Set	60	-	-	-	-	-	-	-	60	1,000	60	-	-	-	-	-	-	60						
Installation of Information Systems (MIS) Software	Lumpsum	1	-	-	-	-	-	-	-	1	25,000	25	-	-	-	-	-	-	25						
Maintenance of the MIS Software	Lumpsum	1	1	1	1	1	1	1	1	8	1,000	1	1	1	1	1	1	1	8						
COI Surveys (Baseline, Midline, Endline)	Number	-	-	-	-	-	-	-	-	3	100,000	100	-	-	100	-	-	-	100						
Annual Outcome Surveys	Number	-	-	-	-	1	1	1	1	3	100,000	-	-	-	-	100	100	100	300						
Project Completion Review	Number	-	-	-	-	-	-	-	-	1	100,000	-	-	-	-	-	-	-	100						
GIS Software Installation and Licence /p	Lumpsum	-	1	1	1	1	1	1	1	7	3,000	-	3	3	3	3	3	3	21						
GIS Specialist	Months	-	12	12	12	12	12	12	12	84	8,000	96	96	96	96	96	96	96	672						
Mapping the existing and new aquaculture and inland infrastructure and setting up a dashboard	Lumpsum	1	-	-	1	-	-	-	1	3	5,000	5	-	-	5	-	-	-	15						
Tracer Study	Study	-	-	-	-	-	-	-	-	1	20,000	-	-	-	-	-	-	-	20						
Economic Feasibility Study	Study	-	-	-	-	-	-	-	-	1	30,000	-	-	-	-	-	-	-	30						
TA for M&E during implementation /q	Lumpsum	-	1	1	1	1	1	1	1	5	10,000	-	10	-	10	-	10	-	50						
Subtotal											184	119	110	245	215	210	220	305	1,604						
G. Knowledge management and communication																									
TV and radio awareness campaigns on environmental, gender and nutrition issues	Lumpsum	-	2	2	2	2	2	2	2	14	3,000	-	6	6	6	6	6	6	42						
Printing of communications materials	Lumpsum	-	1	1	1	1	1	1	1	7	2,000	-	1	1	1	1	1	1	14						
Knowledge management publications	Lumpsum	-	1	1	1	1	1	1	1	7	1,000	-	1	1	1	1	1	1	7						
Exchange visits for technical staff and extension officers	Lumpsum	1	-	-	-	-	-	-	-	3	10,000	-	-	-	-	-	-	-	30						
Organisation of / or participation to listing fairs	Number of workshops	-	1	1	1	1	1	1	1	7	2,000	-	2	2	2	2	2	2	14						
PMU & Gov participation in workshops & SSSTC	Number of workshops	-	1	-	-	1	-	-	-	3	15,000	-	15	-	15	-	-	-	45						
Knowledge management specialist	Months	12	12	12	12	12	12	12	12	84	8,000	96	96	96	96	96	96	96	672						
Subtotal											96	132	107	132	107	132	107	11	624						
H. Unallocated																									
Lumpsum	1	-	-	-	-	-	-	-	-	1	370,000	-	-	-	-	-	-	-	370						
Total Investment Costs											974	682	267	442	527	407	377	361	4,037						
II. Recurrent Costs																									
A. Salaries																									
1. Project Management Unit Staff Salaries																									
Project Manager	Months	12	12	12	12	12	12	12	12	96	10,500	126	126	126	126	126	126	126	1,008						
Finance Management Officer	Months	12	12	12	12	12	12	12	12	96	8,000	96	96	96	96	96	96	96	768						
Monitoring and Evaluation Officer	Months	12	12	12	12	12	12	12	12	96	8,000	96	96	96	96	96	96	96	768						
Procurement and Contracts Manager	Months	12	12	12	12	12	12	12	12	96	8,000	96	96	96	96	96	96	96	768						
Internal Auditor	Months	6	6	6	6	6	6	6	6	48	5,000	36	36	36	36	36	36	36	288						
Accountant	Months	12	12	12	12	12	12	12	12	96	5,000	60	60	60	60	60	60	60	480						
Procurement Assistant	Months	12	12	12	12	12	12	12	12	96	5,000	60	60	60	60	60	60	60	480						
Monitoring and Evaluation Assistant	Months	12	12	12	12	12	12	12	12	96	5,000	60	60	60	60	60	60	60	480						
Project Assistant	Months	12	12	12	12	12	12	12	12	96	3,000	36	36	36	36	36	36	36	288						
Driver	Months	12	12	12	12	12	12	12	12	96	3,000	36	36	36	36	36	36	36	288						
Subtotal											702	702	702	702	702	702	702	5,616							
2. Provincial Staff Salaries /r																									
Provincial Coordinator /s	Months	60	60	60	60	60	60	60	60	480	2,500	150	150	150	150	150	150	150	1,200						
Office assistant	Months	60	60	60	60	60	60	60	60	480	1,200	72	72	72	72	72	72	72	576						
Driver	Months	60	60	60	60	60	60	60	60	480	800	48	48	48	48	48	48	48	384						
Subtotal											270	270	270	270	270	270	270	2,160							
Subtotal											972	972	972	972	972	972	972	7,776							
B. Operating Costs																									
1. Office space (PMU) /t	Months	12	12	12	12	12	12	12	12	96	5,000	60	60	60	60	60	60	60	480						
2. Office space (5 Provinces) /u	Months	60	60	60	60	60	60	60	60	480	3,000	180	180	180	180	180	180	180	1,440						
3. General operating expenses for PMU /v	Lumpsum	12	12	12	12	12	12	12	12	96	2,500	30	30	30	30	30	30	30	240						
4. General operating expenses for Provinces /w	Lumpsum	60	60	60	60	60	60	60	60	480	1,000	60	60	60	60	60	60	60	480						
5. Vehicle O & M	Months	12	12	12	12	12	12	12	12	96	6,200	74	74	74	74	74	74	74	596						
6. Vehicle Insurance	Months	12	12	12	12	12	12	12	12	96	1,500	18	18	18	18	18	18	18	144						
7. Field per diem	Person/year	25	25	25	25	25	25	25	25	200	5,000	125	125	125	125	125	125	125	1,000						
Subtotal											547	547	547	547	547	547	547	4,370							
Total Recurrent Costs											1,619	1,619	1,619	1,619	1,619	1,619	1,619	1,619	12,155						
Total											2,493	2,201	1,786	1,961	2,046	1,926	1,896	1,880	16,192						

a 5 are for the PMU and 5 are for the 5 provinces (one each). A replacement of 5 vehicles is allowed for by the MTR
b 1 Laptop for each PMU officer/specialist and 1 for each Provincial Coordinator. Laptop with software and antivirus.
c Desktop with software and antivirus. 5 are for the five provinces (1 for each province)
d 5 of the printers are for the five provinces (1 for each province)
e It includes accounting software package, annual licenses and technical assistance
f 5 of the Safes are for the five provinces (1 for each province)
g 5 of the Projectors are for the five provinces (1 for each province)
h 5 of the packages are for the five provinces (1 for each province)
i It includes: Server, software, uninterruptible power supply unit
j 5 of the packages are for the five provinces (1 for each province)
k 1 set for each office/specialist. Each set consists of a desk, chair, lamp and a file cabinet
l The set consists of a big table (sitting 12 people) and 20 chairs
m 1 at national level, and 5 at provincial level
n It includes: Main M&E deliverables, Core outcome indicators (COI), and SECAP integration in M&E system
o Assuming 10 table/electronic - consult tec notes
p OGIS could be an option as it is free software under creative commons licence. GIS for mapping project sites, lagoons ponds and infrastructure
q It includes: Main M&E deliverables, Core outcome indicators (COI), and SECAP integration in M&E system, assistance at provincial level for M&E
r Assumes 5 Provinces
s Provincial Coordinators will be getting a top-up to their government salaries
t It includes: office space, security, all utilities and air-conditioning in the offices
u It includes: office space, security, all utilities and air-conditioning in the offices
v It includes: consumable goods, stationery material and communication charges (Internet, telephone and postage services)
w It includes: consumable goods, stationery material and communication charges (Internet, telephone and postage services)

Detailed Design Report

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 Project Design Report

Annex 4: Economic and Financial Analysis

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

Annex 4: Economic and Financial Analysis

A. Introduction

1. **Overview.** This Annex reports the results of the financial and economic analysis related to the Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2) in Angola. AFAP2 will contribute to improved household income, food and nutrition security through sustainable and climate resilient fisheries and aquaculture.
2. This project will generate significant benefits to the inland fishery sub-sector in Angola as a whole, and to the households in the target areas. The main economic project benefits are expected to come from (a) increased productivity of fishing and aquaculture activities thanks to the adoption of improved technology packages for fishing; (b) losses to be avoided from improved post-harvest methods; and (c) improved post-production management, value addition, and marketing. This is expected to increase labour productivity and farm incomes. It is expected that employment will be generated through increased demand for wage workers to contribute to enhanced fishing and aquaculture production. The investments in infrastructure (e.g. markets) will generate further employment opportunities during project implementation.
3. **Structure of the analysis.** The analysis aims at proving the financial and economic viability of the proposed investments. The financial analysis, including fisheries and aquaculture financial models, is reported in section II. The economic analysis, which includes a description of the expected Project benefits, is described in section III. The net benefits derived from the activity level models in the form of incremental benefits with respect to the baseline are aggregated in the economic analysis considering the scale of the project and its targets to assess overall benefits generated from proposed project interventions. Such benefits are compared with the project costs (estimated from the project budget) to assess overall project performance indicators. The financial and economic models prepared for this analysis, as well as a summary of the economic analysis can be found in the attached Excel worksheets.

B. Financial Analysis

4. **Objectives.** The objectives of the financial analysis are: (i) to assess the financial viability of the development interventions promoted under the proposed Project; (ii) to examine the impact of Project interventions on the incomes of the households (HHs) targeted, therefore determining the incentive for the target group for engaging in the proposed activities; and (iii) to establish the framework for the economic analysis of the Project, which will complement the financial analysis to assess the justification from the overall economy' perspective (see section III).
5. **Data.** Quantities and costs of the inputs used in fisheries and aquaculture management, including labour utilized in the different operations, as well the technical coefficients, and the output farm-gate prices have been collected during the design mission, in December 2023. Collected data refer to both 'without project' (WOP) and 'with project' (WP) scenarios, respectively. Secondary data sources have been used to integrate information available and to cross check our findings, including previous investments (e.g., AFAP - Artisanal Fisheries and Aquaculture Project) and data available in the literature as well as in official statistical datasets. Activity budgets are calculated based on financial (farm gate) prices for the financial analysis. For the economic analysis, they are converted into economic prices using *ad hoc* conversion factors. The effects and impacts of climate change are accounted for in the risk and sensitivity analysis.
6. **Methodology and main assumptions.** The analysis is developed by building financial models of the fisheries community-owned co-management and smallholder aquaculture models implemented under the sub-components 1.1 and 1.2, respectively.

Models should be seen only as representative which can eventually be combined in more complex investment options. They refer to average socio-economic conditions in the area. An overall conservative approach is adopted in the models not to overestimate potential benefits and modelled productivity increases consequent to the implementation of the improved technologies promoted by the Project are not unrealistic.

7. The models provide performance indicators both for the WOP scenario – which is the baseline of the analysis – and the WP one. The investment costs related to infrastructures, provision of inputs, training and extension are not considered directly into the models since they are already computed within the overall project costs, so to avoid double counting. The difference between net margins in the WOP versus WP scenarios represents the net incremental financial benefits (per hectare) of switching from WOP to WP management through the implementation of project activities.

8. The WOP scenario refers to conventional management activities where farmers do not adopt suitable technologies, and production levels are below the potential. The WOP models are representative of the current situation which is assumed to remain unchanged during project implementation. The WP scenario simulates the impact on the project beneficiaries of the activities funded through the project. In such scenario, beneficiaries will adopt a community-owned co-management system that promotes the sustainable utilization of fisheries resources, adoption of sustainable fishing practices and access to appropriate fishing tools and equipment. The project will enhance capabilities of small-scale fish farmers, enabling them to boost production, and foster the development of resilient businesses within the aquaculture value chain, including non-fish farming stakeholders. Labour and overall productivity and farm incomes are expected to increase as effect of the implementation of project activities. The increases in fish catch and processing capacity are hypothesized to happen gradually over the implementation period.

9. The activity models simulate financial budget and estimate financial performance indicators (namely, gross margins, net margins and returns to family labour) that are instrumental for assessing the impact of Project interventions on economic activities of targeted households.

10. Gross margins (cash flow) are computed as a difference between total revenue and total operating (variable) costs. Total revenue is computed considering all fish output which is valued using the farm-gate market price. No self-consumption is considered, since the analysis is aimed at estimating HHs' incomes in the WOP and WP scenarios and not at indicating how the income is spent. In any case, including food consumption in the computations would not change the analytical results, as there would be no difference between the value of food purchase on the market and the foregone revenue corresponding to the self-consumption.

11. The operating costs include the costs for running the activities conducted every year during the intervention period, and thereafter during the operational phase of the Project. They include hired external labour but exclude family labour costs. Net margin is derived by subtracting from the gross margins the costs of family labour¹. Returns to family labour are computed as the ratio between the gross margin and the quantity of family labour involved in the production activity. The economic rationale for the Project hinges on the better productivity of the inland fisheries resources by rural riparian communities thanks to effective improved co-management, and on the increased productivity of aquaculture ponds thanks to the adoption of sustainable small-scale aquaculture technologies and the enhanced supply of aquaculture inputs.

12. All labour is valued in the models using as a proxy the market rural wage of 2,000 Kz/person-day. Since the goal of the analysis is to consider all the input costs, labour is valued in the same way, no matter if the labourer is a family member or an external labourer. In other words, the analysis looks at labour costs within overall production costs.

¹ All costs borne at HH level have been included in the models. Thus, HHs' financial capacity to cover the incremental production costs is already considered in the net margins and corresponding HHs' incomes.

Most smallholders, however, do not rely on hired labour and use only manual family labour (indeed labour is often a constraint to the expansion of cropped land), without considering the real labour costs. Therefore, in each crop model, both the gross and net margins are computed (where the net margin is obtained by subtracting the labour costs from the gross margin), to fully consider production costs. Last, the labour-related indicator returns to family labour (ratio between gross margin and total family labour used in farming activities) is built. The returns to family labour indicate how much is earned for each day of work attributed to the crop enterprise, irrespective of who provided the labour. It provides an indicative assessment of the convenience in undertaking the farming activity. It must be noted that there is no difference between the value of food purchase on the market and the foregone revenue corresponding to the self-consumption.

13. **Model specifications.** The canoe fishing in the lagoon model simulates the fishing activity of one household. Under the WP scenario, the household gains the benefits of the implementation of a community participatory fishery management in targeted lagoons. The following analytical assumptions are made: a typical canoe fisher would be able to increase his catch levels from a daily catch of 5 kg in the WOP situation to 18 kg in the WP situation. This will gradually happen as fish stocks regenerate in the lagoons thanks to the sensitisations and support for sustainable fishing around these water bodies. The fish species considered is the *Cacussaria Quarto* (Cacusso-fish). Sales of fresh fish amount at 95% of total catch (a 5% loss is assumed). Even if fish production is partly sold and partly self-consumed, given the objectives of this analysis all production is valued using market prices and is included in the total revenues. Apart from own labor (family labor), replacement of fishing nets, there are virtually no other operating costs. Canoe fisher does not need ice, as catch levels are sold on the spot to fresh fish mongers.

14. The project will support the construction of fishponds for aquaculture production. In addition, the project will support cage aquaculture in selected lagoons. These two interventions are captured as separate models to assess the financial viability of fishponds and the cage aquaculture.

15. The pond aquaculture model simulates the production of Tilapia in fishponds conducted by smallholder households. While it is acknowledged that the fish farming activity is conducted by smallholder farmers within production groups/cooperatives, the model summarizes revenues and costs associated to the management of one pond, conducted by a single-family production unit. The following analytical assumptions are made: The analysis refers to the aquaculture activity conducted over 1 tank (pond), for 1 year (2 production cycles). One pond is characterized by an area of 450 sq mt. Fingerlings of 15-20g will be introduced in the pond for each cycle. Mortality rate of the fingerlings is equal to 6%. Fingerlings survival rate is estimated at 70%. A better survival rate will result in better financial returns to the fish farmer. A target weight of 350g per fish is used at about 6 months. In the first year, only one harvesting cycle is feasible given the excavations and pond development processes. From year two onwards, two harvesting cycles are feasible. With two harvesting cycles in a year, total fish harvest will amount to 1,840 kg per pond. Postharvest losses are minimal because of on-spot selling but nevertheless a provision of 5% has been made. The sales are computed accordingly. Even if fish production is partly sold and partly self-consumed, given the objectives of this analysis, all production is valued using market prices. Investment costs cover the following expenses: Excavation kit, Mechanical excavation/compaction of tanks, Labor of excavating using tractor. Fixed annual costs refer to tanks' repair and maintenance (which takes place every 5 years). They consist of a 25% fee on the costs for excavation / compaction of the tanks (for the whole 5-year production cycle). Variable costs (annual operation costs) include fish food, fingerlings, fertilizers, urea, and limestone. The proposed model is not labor intensive. Manual labor is provided by the members of the household managing the pond. Its value must be part of the operational costs.

16. The cage aquaculture model simulates the production of Tilapia in cages located in the lagoons conducted by a single-family production unit. The analysis refers to the aquaculture activity conducted over 2 cages in the lagoon, for 1 year (2 production cycles).

Fingerlings of 15-20g will be introduced in the cage for each cycle. Mortality rate of the fingerlings is equal to 6%. Fingerlings survival rate is estimated at 70%. A better survival rate will result in better financial returns to the fish farmer. A target weight of 350g per fish is used at about 6 months. It is assumed that the production will gradually increase thanks to the improvement of the productivity of the fishing unit, thanks to project's activity. The sales are computed accordingly. Even if fish production is partly sold and partly self-consumed, given the objectives of this analysis, all production is valued using market prices. Investment costs cover the following expenses: cages and buckets. Variable costs (annual operation costs) include fish food, and fingerlings. The proposed model is not labor intensive. Manual labor is provided by the members of the household managing the pond. Its value is part of the operational costs.

17. Since the project is also developing marketing activities related to fish product (Component 2) a set of three models are built with reference to processing and marketing of fish product (smart kiosks and markets): fresh fish trader model, smoked fish trader model and dried fish trader model. They simulate simple value chain infrastructure to facilitate the delivery of better quality fish to the market, improve hygiene of the preliminary processes, reduce post-harvest losses and increased incomes by increasing the profitability of this better type of dried / smoked fish among stakeholders engaged in fish trade. The models include investment costs (construction, equipment) and operational costs (cost to purchase raw fish, family labour costs, and energy costs for smoking fish, as drying is realised under the sun). The value of raw fish, included in the processing models as a working capital cost, is estimated based on the market prices. Specific conversion ratios from fresh fish to dried and smoked fish is also included in the analysis (to account for the moisture loss occurring during processing). Also, a small percentage of loss in the processing of drying and smoking of fish is included into the cashflow. The sources of the supply of the raw fish for these three models is represented by the same beneficiaries who are involved in open fishing and pond-fishing. They indeed supply their fish for processing at the market price and only the value addition benefit of this supply chain is be considered in the analysis.

18. **Results.** The list of models - including performance indicators such as annual gross and net margins, returns to labour, Net Present Value (NPV) and Financial Internal Rate of Return (FIRR) as appropriate - are reported in Table 1. The results of the financial analysis indicate that the investment activities promoted by the project generate financially profitable results. Indeed, the FIRRs are above the financial opportunity cost of capital in Angola (see Table 2) and the NPVs are positive. Indicators are estimated over a 10-year time frame. The cash flow is always positive but in the first year – because of the incidence of the investment costs which are borne at the beginning of the activity – indicating the capacity of the management/production model to repay the costs of the investments and that there is sufficient financial incentive for typical small family households to participate and for subsequent investments in fish farming at household level. Detailed results can be found in the companion Excel file.

Table 1. Financial analysis results

a) Canoe fishing in the lagoon model

Return to family labour*	5,030
*consider full development year family labour requirements	
Discount rate	11%
NPV @ 0.10755	6,473,949
FIRR	42%
PVB	24,178,180
PVC	17,704,231
B/C ratio	1.37
Switching values Benefits	-0.27
Switching values Costs	0.37

b) Pond aquaculture model

Return to family labour*	9,605
*consider full development year family labour requirements	
Discount rate	11%
NPV @ 0.10755	7,049,905
FIRR	148%
PVb	12,897,430
PVc	5,847,524
B/C ratio	2.21
Switching values Benefits	-0.55
Switching values Costs	1.21

c) Cage aquaculture model

Return to family labour*	6,394
*consider full development year family labour requirements	
Discount rate	11%
NPV @ 0.10755	3,343,185
FIRR	84%
PVB	11,359,619
PVC	8,016,434
B/C ratio	1.42
Switching values Benefits	-0.29
Switching values Costs	0.42

c) Fresh fish trader model

Return to family labour*	3,050
*consider full development year family labour requirements	
Discount rate	11%
NPV @ 0.10755	447,695
FIRR	16%
PVB	44,953,114
PVC	44,505,420
B/C ratio	1.01
Switching values Benefits	-0.01
Switching values Costs	0.01

d) Smoked fish trader model

Return to family labour*	3,353
*consider full development year family labour requirements	
Discount rate	11%
NPV @ 0.10755	1,156,052
IRR	22%
PVB	64,032,823
PVC	62,876,771
B/C ratio	1.02
Switching values Benefits	-0.02
Switching values Costs	0.02

e) Dried fish trader model

Return to family labour*	3,546.00
*consider full development year family labour requirements	
Discount rate	11%
NPV @ 0.10755	331,262
IRR	13%
PVB	82,758,060
PVC	82,426,798
B/C ratio	1.00
Switching values Benefits	-0.00
Switching values Costs	0.00

Source: Author's elaboration

19. **Exchange rate and opportunity cost of capital.** The official exchange rate (OER) of 829 AOA/USD is used (February 2024). The financial interest rate provides the alternative financial returns/opportunity costs to the investor. It is used here to assess the viability and robustness of the investments as compared with market alternatives. The financial discount rate is estimated at 10.8%, computed as simple average between official deposit and lending interest rates (see **Table**). Such rate is used to estimate the financial Net Present Value (NPV) of the production models.

Table 2. Financial opportunity cost of capital

	Average deposit interest rate (2023)	Lending interest rate (2023)	Deposit interest rate at Commercial Bank (2022), lower bound	Deposit interest rate at Commercial Bank (2022), upper bound	Average
Rate (%)	6.85%	15.67%	8.5%	12.0%	10.8%

Source: Author's elaboration based on data from The World Bank and The National Bank of Angola

C. Economic Analysis

20. **Objectives.** The economic analysis objectives are to: (i) determine the economic viability and overall cost effectiveness of the project, estimated from the perspective of the society rather than the individuals, through the comparison of aggregated economic

benefits with project economic costs and the assessment of the economic internal rate of return (EIRR); and (ii) perform sensitivity analysis to measure the robustness of the proposed investments and to measure variations in the overall EIRR due to risk and unforeseen factors, including climatic events. Details of the economic analysis can be found in the companion Excel worksheets.

21. **Methodology and assumptions.** The economic analysis is based on the estimation of the benefits gained from the increased economic performance of the HHs targeted by the project. The main quantifiable economic benefits from the project are represented by the net incremental benefits as computed in the financial analysis, i.e., the difference between the annual net benefits in the WOP and WP scenarios. Such benefits are aggregated over the total number of beneficiaries. The economic analysis is conducted over a 20-year period, included the 8-year implementation period of the proposed project. Specifically, the HH models discussed in the financial analysis above are used to link the fishery and aquaculture activity models with the number of HH beneficiaries (set as target), estimate the overall flow of benefits, and compute the EIRR.

22. During the aggregation of the benefits, the subsidies provided by the project in terms of financing of the capital expenditure of the various investment models have been deducted by the net incremental benefits to avoid double counting of the costs.

23. Economic benefits are estimated using economic prices (instead of the financial ones). Financial prices of tradable goods are converted into economic ones using a Standard Conversion factor (SCF) computed as shown in **Table** .

Table 3. Computation of the Standard Conversion factor (SCF) for the economic analysis

Variable	Rate	M \$	Source of data and notes
1) total imports (M)		4,512	Banco Nacional de Angola
2) total exports (X)		13,676	Banco Nacional de Angola
3) import tariff (Tm)	21.6%	975	WTO, Simple average MFN applied on agriculture products
4) export tariff (Tx)	0%	-	WTO
Shadow exchange rate (SER)	873		$SER = (M+X) / [(M+Tm) + (X-Tx)] * OER$
Official exchange rate (OER)	829		
Standard conversion factor (SCF)	1.05		$SCF = SER / OER$
Value addition tax (VAT)	14.0%		VAT applied to all tradable goods

Notes:
 $SER = (M+X) / [(M+Tm) + (X-Tx)] * OER$
 $SCF = SER / OER$
 VAT applied to all tradable goods

Source: own calculations

20. The economic analysis links social discount rates to the long-term growth prospects of the country where the project takes place. Indeed, the economic role of the social discount rate (SDR) is to guide the allocation of public resources into the most desirable social investments. The SDR parameter is estimated as per the IFAD EFA guidelines by taking into account: i) public nature of the investment; ii) scarcity of resources; and iii) good use of public funds. Based on the available data, the interest rate on treasury bonds (Source: National Bank of Ethiopia) is used for estimating the SDR.

24. **Direct project beneficiaries, aggregation and benefits flow** – AFAP-2 will directly target a total of 31,000 vulnerable, poor and disadvantaged rural households engaged or willing to engage in artisanal fisheries and aquaculture. This corresponds to about 148,000 household members. The target group are classified into three categories: a) Category 1 (C.1) – represents about 10,000 very vulnerable and poor households; b) Category 2 (C.2) – represents about 20,000 vulnerable households (small-scale artisanal fishers, aquaculture farmers, local economic initiatives); and c) Category 3 (C.3) – brings together 1,000 local actors in the form of micro, small and medium-sized enterprises, formal or informal, already active in local supply chains, performing functions such as supply of inputs (fingerlings and feeds, trainers, processors, aggregators, marketing of fishery and aquaculture products, etc.).

25. The current analysis considers the total target of 31,000 households. The beneficiaries will be reached through specific training activities and will also be exposed to the demonstrations to get the technology. It is expected that only a percentage of such beneficiaries will adopt all technologies to get the full potential fish catch. In line with the project logframe, it is assumed that the adoption rates will be 60% for the marketing models (see the Logframe target, 60% households reporting improved physical access to processing facilities) and 70% for the fishery and aquaculture ones (see the Logframe target, 70% households reporting adoption of new/improved inputs, technologies or practices). The incremental targets are shown in Table 4. They are used for the aggregation of the unit benefits (net incremental benefit per household) and the derivation of the flow of benefits. Such flow is in line with the budget distribution. Indeed, in the first year, only preparatory activities are conducted and no activity directly involving the target beneficiaries is planned. The beneficiaries are increasingly involved gradually from year 2 to year 4. Subsequently, the incremental number of target beneficiaries decrease to prepare for the exiting strategy.

26.

Table 4. Number of HHs targeted and corresponding financial models

Number of households	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Total
Output 1.1 Establishment of effective inland fisheries management systems	-	1,650	2,200	3,300	2,200	1,650	-	-	11,000
Output 1.2 Development of resilient and business-oriented aquaculture production systems	-	1,500	2,000	3,000	2,000	1,500	-	-	10,000
Output 2.1 Development of aquaculture and inland fisheries market-linked enterprises.	-	1,500	2,000	3,000	2,000	1,500	-	-	10,000
Output 2.2 Establishment of market and value addition infrastructure									
Total									31,000

Source: Author's elaboration

27. **Indirect project beneficiaries and benefits.** There will also be large numbers of smallholders who will benefit indirectly from the Project through diffuse knowledge of improved fishery and aquaculture. Consumers would also benefit from more, better quality fish products and better prices, with positive effects in terms of improved nutrition and overall food security. In addition to this, all those living in the rural areas where supported households will be located will benefit from strengthened local economies resulting from inflows of income and strengthened local demand. There will also be increased job opportunities for unemployed and underemployed women and men living in rural areas. The expansion of fishery and aquaculture economy will also promote development of other complementary economic activities (e.g., input dealers). Thus, project activities will indirectly stimulate the whole rural economy benefiting rural population (including the rural poor) through increased demand for goods and services, additional employment opportunities and possibly reduced rural-urban migration. However, these indirect benefits

are not considered in this analysis. In this sense, benefits computed here should be considered an underestimation of total potential benefits of the proposed investments.

28. **Timeframe.** The economic analysis is conducted over a 20-year period (including the 8-year Project duration).

29. **Economic Project Costs.** Total project costs of 90 M\$ invested over 8 years are derived from the draft budget. They are transformed into economic costs using the COSTAB software: a total economic cost of 77.3 M\$ is used in the analysis. No investment costs after year 8 were considered necessary. Annual operating costs were included from year 8 to 20, as it is assumed that these costs will have to be incurred if the benefits of the project are to be sustained. To avoid double counting of the costs, only the incremental economic costs of the project are considered (i.e., the costs of activities funded by AFAP2). Costs already included in the estimation of the net incremental benefits of the individual project activities models (e.g., costs directly borne by farmers engaging in the proposed activities or the project and accounted for in the financial/economic models) have been excluded as they are incorporated in the aggregation of the HH or activity models.

30. **Economic performance indicators (EIRR and NPV).** The following economic performance indicators of the proposed investments are computed: *Net Present Value (NPV)*, *Economic Internal rate of Return (EIRR)*, and *Benefit-cost ratio (BCR)*. The expected EIRR is computed to illustrate the need for funding and overall cost effectiveness of the project. The overall EIRR of the project is estimated at 21% (base case) which is well above the opportunity cost of capital in Angola (10.8%, see Table 2) confirming the economic justification of the project. Given that the analysis considers only 20,700 households, i.e. about 67% of the total target (weighted average of the adoption rates indicated in the Logframe), in case of higher adoption rate, the EIRR will increase further. In addition to this, the analysis only considered the economic benefits at farm-gate. The indirect benefits to upstream and downstream actors in the value chain from increased trade volumes, quality and value adding opportunities beyond those mentioned above, have not been considered due to estimation difficulties. The economic NPV is estimated at about 219.9 M\$ over the 20-year period of the analysis, with the benefit stream based on the quantified benefits as specified above. The discount rate adopted in the economic analysis is 5%.

31. **Sensitivity Analysis.** To test the robustness of the above results, a sensitivity analysis has been carried out to measure variations due to unforeseen factors and relevant risks. The following scenarios are simulated: 10, 20 and 50% cost over-run, benefits increment, benefits decrease, and 1 and 2 years of benefits delays.

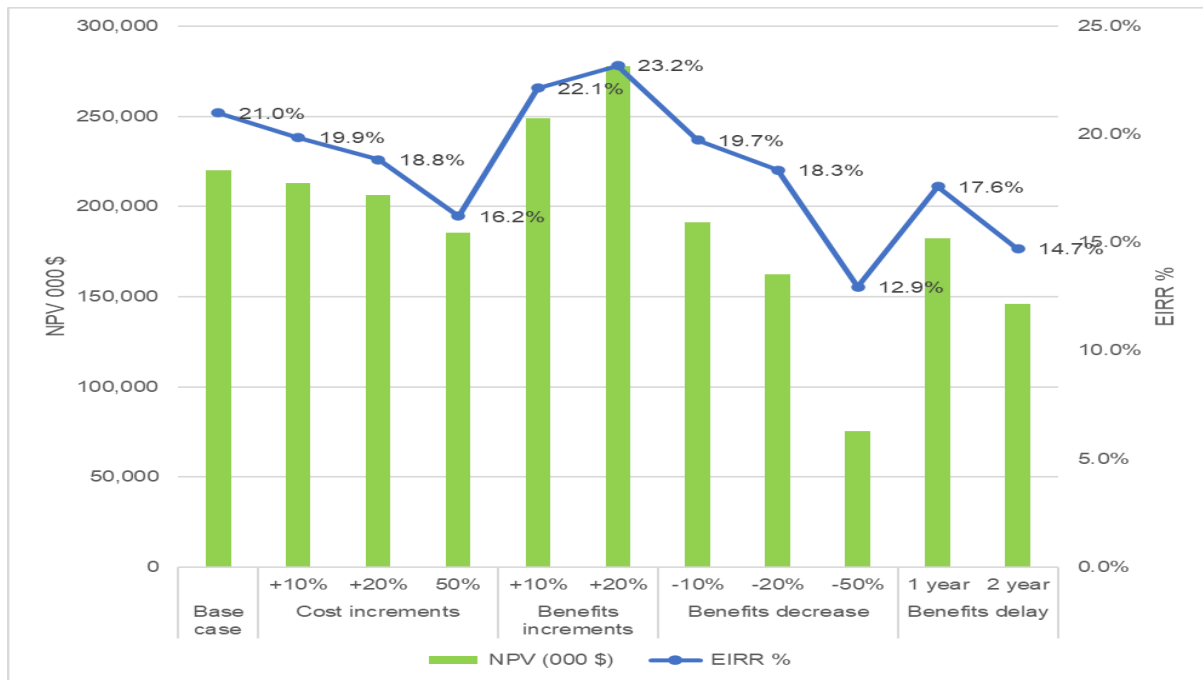
32. Results are presented in Table 5 and Figure 1. It is found that the proposed project is solid from the economic standpoint since the project is profitable under all simulated changes.

Table 5. Summary of the economic and sensitivity analysis

Project performance indicators	Base case	Cost increments			Benefits increments		Benefits decrease			Benefits delay	
		+10%	+20%	50%	+10%	+20%	-10%	-20%	-50%	1 year	2 year
EIRR %	21.0%	19.9%	18.8%	16.2%	22.1%	23.2%	19.7%	18.3%	12.9%	17.6%	14.7%
NPV (000 \$)	219,948	213,072	206,196	185,569	248,818	277,689	191,077	162,207	75,595	182,116	145,758
B/C ratio	4.20	3.8	3.5	2.8	4.6	5.0	3.8	3.4	2.1	3.7	3.5

Source: Author's elaboration

Figure 1. Results of the economic and sensitivity analysis



Source: Author's elaboration

33. **Risk analysis.** The bulk of risk to be considered in the sensitivity analysis relates to: a) delays from some of the Institutions charged with the responsibilities of implementing and/or overseeing the implementation of some of the project activities; b) farmers reluctant to fully engage in the project and adopt the farming practices disseminated; c) worsening of the macroeconomic scenario; d) increased climatic risk affecting temperatures and water availability consequent to climatic changes; and d) discontinuation of practices once the project ends. Table 6 reports the impact of each of the key risk components on Project economic performance indicators. The probability of occurrence is supposed to affect the entity of cost/benefit increases/decreases reported above, i.e., a low probability translates into a 10% decrease in benefits (or 10% cost increase, or a 1-year delay in benefits), while a medium probability is supposed to determine 20% benefits decrease (or 20% cost increase, or a 2-years benefits delay), and a high probability relates to 50% benefits decrease (or 50% costs increase). It is important to notice that these impacts should be considered as indicative and have been arbitrarily determined based on secondary information.

Table 6: Risk analysis

Risk description (link with the risk matrix)	Occurrence probability	Proxy to compare with sensitivity analysis results	EIRR (%)	NPV (000 \$)
INSTITUTIONAL: Limited Institutional capacity	Low	Benefits delay 1 year due to implementation risk	17.6%	182,116
ECONOMIC: Worsening of the macroeconomic scenario	High	Increase in costs due to inflation higher than planned, and the consequent increases in input costs	18.8%	206,196
SOCIAL: Farmers reluctant to fully adopt the farming practices disseminated	Low	Decrease in benefits due to the lower adoption rate	19.7%	191,077
CLIMATIC: increased risk affecting temperatures and water availability	Medium	Increase in benefits due to the worsening of the WOP scenario	23.2%	277,689
POLITICAL: Discontinuation of practices once the project ends	Low	Decrease in benefits due to the suspension of climate-resilience practices and benefits capitalization	19.7%	191,077

Source: Author's elaboration

D. Conclusions

34. The economic analysis has confirmed the convenience of the investment, from the society's standpoint: overall EIRR of 21% even in the case that at the end of the project only 67% the total target beneficiaries would adopt the proposed practices and technologies. The positive results are strong as shown in the sensitivity and risk analyses for adverse situations. These indicators - while monitoring performance during the implementation of the project - can provide valuable information for adjusting the strategy and interventions to improve the project impact.

35. The analysis has been conducted based on the available information and data and to the best of Author's knowledge. The validity of the analytical assumptions may limit the findings presented here. All assumptions and calculations are transparently shown in the companion Excel file which is made accessible to the reader.

Angola

Artisanal Fisheries and Aquaculture Project Phase 2

Project Design Report

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

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

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

1. Introduction

1. The Social Environment Climate Assessment Procedures (SECAP) review note informs the design of Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2) by providing the social, environmental and climate change situational analysis. The analysis guides the social and environmental risk management as well as the climate change adaptation and resilience building of the target communities and their livelihoods. The Review Note aligns with the Government's existing sustainable national development policies, environmental action plans and climate change strategies. The Review Note evaluates the development context and proposes measures to mitigate the identified risks.
2. The main objectives of the analysis presented in this Review Note are:
 1. To assess the current and future environmental and social impact of the AFAP-2 interventions within the context of Angola's strategies and actions towards poverty reduction, food and nutrition security and community resilience to climate change.
 2. To propose social, environmental considerations and climate change adaptation and mitigation measures to be integrated into the project activities. The proposed activities provide strategic opportunities for AFAP-2 to maximise the positive benefits aligned with national/rural sector development plans and the country's contribution to achieving the Sustainable Development Goals (SDGs) and Nationally Determined Contributions (NDCs).
3. This SECAP Review Note is based on reviews of various secondary sources, including the Government of Angola's country reports, legal, institutional, policy, and programme documents. Furthermore, the Review Note includes a review of IFAD strategies and action plans and reports from other multilateral agencies and development partners, together with findings from consultations of key stakeholders in-country and virtually.

2. Situational analysis and potential project impacts

4. Based on the SECAP screening, consultations and the field visits conducted during the design mission, the main social risks and impacts of the project include the risk that the project could: (i) be located in areas that have experienced flooding resulting in infrastructure damage or droughts resulting in limited water availability; (ii) potentially lead to an increase in diseases such as malaria and waterborne diseases as a result of water bodies in the vicinity of community residences; (iii) result in land use change and consequently increased erosion and therefore land degradation; (iv) increase demand on water resources for the aquaculture activities and (iii) deepen social inequalities (for women, people with disabilities -PWD).

2.1 Socio-economic assessment

a. Overall poverty situation

5. *Demographics*

6. With an area of 1,246,700 km², Angola is the largest country in Southern Africa. Its population was estimated at 35.59 million in 2022, with 32 per cent living in rural areas (World Bank, 2023) and an average density of 28.55 inhabitants per km². The country is experiencing rapid population growth. The natural population growth rate is 3.1 per cent. Two thirds of the population is under 25 years old^[1]. The fertility rate (5.1 in 2023^[2]) is one of the highest in the world. Women have an average of six children nationally and eight in rural areas^[3]. Angola has one of the highest infant mortality rates (4.8% in 2020). Life expectancy was an average 62 years in 2021. In addition, the adolescent fertility rate is the third highest in the world, and about 30 per cent of Angolan adolescent girls become mothers^[4]. This limits women's and girls' access to education, employment and participation in public life and increases the risk of poverty, food insecurity and malnutrition.
7. The AFAP-2 intervention area covers approximately 260 600 km² (i.e. 21% of the territory) and includes 6.05 million inhabitants^[5] (i.e. 17% of the estimated population of 35.58 million in 2022)^[6], of whom 3.1 million are women and almost 2 million are youths^[7] aged between 15 and 34, i.e. 50.8% and 33% respectively of the total population of the five provinces^{[8],[9]}. The population density in this area is 18 persons per square kilometre.
8. **Country Poverty and Inequality Profile**

9. Angola is a lower middle-income country, with a Gross National Income per capita of US\$4,830 (2014)^[10]. The country faces significant challenges in terms of the development of basic social services and the persistence of social inequalities, including gender inequalities. Since 2008, more than half of the population has been living below the poverty line of \$3.65 a day in lower-middle-income countries.^{[11],[12]}
10. According to the Multidimensional Poverty Index, the UNDP Human Development Report 2023 indicates that in 2021, 51 per cent of the population (17.63 million people) lived in multidimensional poverty, 32.5 per cent in extreme poverty and 15.5 per cent (an additional 5.4 million people) were vulnerable to multidimensional poverty. The incidence rate of multidimensional poverty in the rural areas (87.8%) is more than twice that of the urban areas (35.0%)^[13]. In rural areas, about 9 out of 10 people live in multidimensional poverty. Also, the intensity of poverty is higher in the rural areas than in the urban areas. Bie province and Uige provinces are among the nine provinces with an incidence rate of poverty greater than 70 per cent, which means that seven out of 10 people in these provinces are multidimensionally poor, which is among the highest in all the 18 provinces^[14]. The poor suffer on average about 50% deprivation of key indicators among which are nutrition, maternal health care, child mortality, school attendance, dependency, water and sanitation^[15].
11. The GINI index, which stood at 51.34 in 2018^{[16],[17]}, testifies to the depth of inequality, although encouraging developments have been observed since 2021, as shown by the inequality-adjusted Human Development Index (HDI) (which fell by 30.5 per cent, bringing this HDI down to 0.407^[18]), the gender inequality index (GII, which stands at 0.537) and the gender-related development index (GDI, which is established at 0.903). However, the persistence of poverty and inequality contributes to the country's poor ranking on the HDI (148th out of 191 countries and territories). Rural populations, especially young people and women, are most affected.
12. According to the World Bank (2020)^[19], vulnerability to drought is high in most provinces and drought leads to increase in severity of poverty, increased food insecurity and child malnutrition. Strong dry spells are constantly hampering the rainy seasons and the hydrological years in Angola. Reportedly, the humanitarian situation is dire^[20]: people are fleeing the most affected areas and food security issues are spreading. The droughts are hitting at the core of the growing seasons, affecting crops and rangelands. Most of the population is employed in small-scale subsistence agriculture, with no access to modern agronomic technologies and irrigation. Poverty is widespread and food insecurity is a concern. Due to overreliance on rain-fed agriculture, the southern provinces are thus exposed chronically to drought which, in addition to the national socio-economic issues, minimises the coping and recovery capacity of population and the local economy.
13. The impact of droughts has been exacerbated by significant inflation, which limits access to food, basic goods and public services. Local authorities lack the capacity and resources to fully implement the drought response. Water projects (repairs and construction of boreholes) initiated by local governments have come to a standstill due to the lack of resources to pay contractors and a low capacity of implementation, especially in remote provinces.
14. Vulnerability rates are higher in rural areas as compared to urban areas. Vulnerability to poverty in rural Angola is due to low human capital and physical capital assets, low asset endowments, low ownership of assets, low level of education, large household size and dependence on subsistence rain fed agriculture. Unemployment is higher in urban areas than in rural areas^[21].
15. **Socio-economic characteristics of poor households**
16. Most agricultural production is carried out by rural households, led by small-scale farmers^[22]. It is estimated that 80 per cent of farmers are smallholders^[23]. Agriculture and fisheries account for more than half of total employment^[24]. Overall, 15 per cent of households live in extreme poverty.
17. In rural areas, 94 per cent of households are in the poor category. In addition, there is a certain social hierarchy in the manifestations of poverty within households. In households with three or more children, the incidence of poverty increased by more than double that of households with only one dependent child (INE, 2020b, p31). Households with children aged 0-14 are among the households most affected by poverty (one-third of these households live on less than \$2.15 a day).^[25] According to an analysis of multidimensional child poverty, 74.4 per cent of children aged 0-14 years' experience three to seven different deprivations^[26].
18. **Socio-economic importance of fisheries and aquaculture in Angolan livelihoods**
19. Fisheries is an important economic activity in Angola and accounts for 3–5 per cent of GDP, a relatively high contribution compared to the world average of 0.5–2.5 per cent. Considering that 90 per cent of GDP in Angola is dependent on oil, with highly fluctuating global prices and demand, the importance of fisheries goes beyond its modest contribution to national GDP. The sector offers significant opportunities for investment, technological innovation, value addition, job creation and exports, particularly for young Angolan entrepreneurs and graduates^[27].
20. Small-scale fishing remains the main source of employment in the fisheries sector. More than 90 per cent of jobs are related to small-scale fisheries^[28]. Unfortunately, the profile of coastal populations and communities concerned by small-scale fisheries is characterized by poverty and vulnerability as alternatives to fishing are rare^[29].
21. In addition, the fishing industry contributes significantly to the country's food security. The estimated consumption of fish in the areas is estimated at 17 kg/inhabitant/year, which represents one third of the animal protein consumed^[30]. Thus, "the nutritional role of fish in the diet of Angolans is recognized as essential and justifies the intervention of the authorities in the various investments and support in terms of infrastructure and equipment in several provinces to guarantee the conservation of fish and

the development of marketing channels"[\[31\]](#). Most of the fish caught (more than 90%) is sold on the domestic market because demand is high and is not fully met. Building the capacity of vulnerable households in small-scale fisheries is a real opportunity to lift them out of poverty and vulnerability, while ensuring the country's food and nutrition security.

22. Despite its huge potential, the fisheries and aquaculture sector remains underdeveloped, characterised by the dominance of artisanal and traditional fishing activities. Angola is rich in marine fisheries along the 1650 km coastline and has the richest fish stocks in Africa. Inland water resources are also relatively abundant, with major rivers (e.g., River Kwanza) stretching for more than 10,000 km in addition to multiple small springs. There are limited fish catches mainly from small-scale fishermen.
23. In addition, the small-scale fishing sector faces several constraints. There is a lack of basic infrastructure and services (ports, electricity, water, telecommunications and financial services adapted to small-scale fishing). Despite fishing rights reserved for Angolan nationals and subsidies for the purchase of fuel, the artisanal sector is struggling to develop in the face of competition from industrial fishing. In addition, access to basic social services is almost non-existent in rural areas far from provincial or municipal centers. These situations contribute to keeping rural small-scale fisheries households in a situation of increasing poverty and vulnerability.
24. Although not many women are engaged in fishing, they dominate the post-harvest end of the value chain through processing, especially smoking and drying, marketing and preparation for home consumption[\[32\]](#). Most of the fish produced in Angola is consumed locally, with a steady increase in annual fish consumption per capita from 13 kg in 1995 to 19.8 kg in 2018[\[33\]](#).
25. Aquaculture production is low but with high potential and mainly constrained by lack of fish feed, seed, appropriate technical skills and under-developed infrastructure. Although Angola is a net food importer, national fish production contributes 30 per cent of total animal protein consumption, reaching levels above 50 per cent in coastal communities. Rural artisanal fishing represents 6 per cent of the Angolan economy. Tilapia species (locally known as *cacusso*) are among the most abundant freshwater fish caught and appreciated in Angola. Other species include catfish (locally known as *bagre*) and freshwater prawns of the species *Machrobrachium rosenbergii*, largely cultivated in Southeast Asia for the international market[\[34\]](#). Those fishing use dugout canoes made from tree trunks, small, planked boats and wooden canoes of 3 to 4.5 metres in length, operated either with oars or poles, with some powered with small engines. Available information, though limited, on catches and landings seems to indicate clear signs of over-exploitation in many of the lagoons closer to major urban centres, with fishermen and women having to spend twice as much time to catch the same quantities as before. The introduction of management measures based on scientifically based total allowable catches has been identified as priority[\[35\]](#).
26. Aquaculture production in Angola is on a small scale and focused mainly on freshwater bodies by communities or by private operators, using earthen ponds or floating cages. The main constraint facing investment in aquaculture operations is still the high cost of imported fish feed, making fish expensive in the absence of locally made cheap feed. Despite the presence of institutions, this sector is still under-developed, and several challenges exist that need to be addressed by development partners. i.e., decreasing stocks due to poor management and illegal fishing practices; pollution from extractive industries; conflicts between fishing communities and industrial vessels; and climate change. Fisheries and aquaculture can increase resilience in moments of climate change[\[36\]](#).
27. Angola's fisheries and aquaculture sector faced with food safety issues and quality risks posed by inadequate infrastructure and know-how that result in unhygienic post-harvest practices, with no or very limited value addition. Furthermore, post-harvest losses remain very high, especially in the artisanal sector, which lacks appropriate landing infrastructure, access to potable or clean water, electricity, ice and storage facilities, roads and cold chain transport to lucrative markets[\[37\]](#).
28. Artisanal fisheries in Angola have a long tradition of co-management through cooperatives that are formalised through government laws and national integrated plans[\[38\]](#). The first fisheries cooperative in the country was established in 1978 (Du Preez, 2009) as a voluntary "bottom-up" enterprise characterised by mutual self-help[\[39\]](#). Although the cooperative movement has been strengthened since then, it has been assimilated into Angola's broader poverty reduction and food security strategy. All along the Angolan coast, over 185 communities of artisanal fishermen and women are registered, with the greatest number located in the Northern provinces. In many of these communities, fishermen and women are organised in cooperatives or associations that are reserved only for Angolan citizens. A cooperative is a group of 10 to 25 persons involved in fishing with equal rights and opportunities, whereas an association is a group of cooperatives having common objectives and interests[\[40\]](#).
29. **Agriculture oriented livelihoods:** Agriculture production is based on subsistence family food crop and livestock production. The major food crops grown in the Northern and Central regions include maize, sorghum, millet, rice, beans, groundnuts, cassava, sweet potatoes and Irish potatoes, mostly produced during the main planting season of September to May, accounting for 95 per cent of cereals and pulses produced in Angola. A subsidiary growing season between June and August contributes only 5 per cent of pulses and cereals and production of multiple vegetable varieties including cabbages, tomatoes, lettuce, onions, peppers, carrots, pumpkins and sweet potatoes. Livestock rearing (cattle and sheep and goats) is predominant in the southern and part of central provinces and provides a source of income. Pigs and poultry are mainly owned by women. However, the country imports most of its food, hence the need to develop agriculture to meet the urban demand as well as the needs of rural areas[\[41\]](#).

b. Gender

Issues relating to gender equality. There is widening gender inequality in Angola with an overall Global Gender Gap score of

30. 0.657, positioning it at 119 out of 153 countries^[42]. Women constitute 51 per cent of Angola's population^[43]. More than half (7,014,481 women) of the country's 13.6 million economically active people are women^[44] (Female participation in the labour market is 76.1 per cent compared to 78.9 per cent for men).
31. Although Angola has made significant progress in guaranteeing women's rights, there are still many obstacles to women's full and equal participation in decision-making at community, household and public levels in the country. Indeed, the country faces structural and socio-cultural inequalities between men and women that limit women's opportunities for empowerment. These inequalities are: a- limited access to education, b- lack of policies on sexual and reproductive health and rights^[45] c-violence against women, d-limited work opportunities, e-low remuneration for work and limited participation in public and political life (e.g. only 31 per cent of seats in parliament are held by women).
32. **Women's access to education and employment.** In 2022, the unemployment rate was 28.9 per cent for women and 30.4 per cent for men.^[46] Informal employment accounted for 80.5 per cent of total employment (87.9 per cent for women, 72.3 per cent for men, 95.2 per cent for young women and 91.3 per cent for young men).^[47] In Angola, 27 per cent of women are less likely to be salaried workers compared to 40 per cent of men. As for employed women, 81 per cent are in vulnerable employment compared to 54 per cent of men^[48].
33. In addition, in 2019, the net enrolment rate in primary education was 63.9 per cent.^[49] The net enrolment rate in secondary education is even lower (lower secondary: 23 per cent; upper secondary: 6.6 per cent^[50]). Retention and completion rates are declining at each level, especially among girls. In 2022, the literacy rate for adult males (15 years and older) was 83 per cent compared to only 63 per cent for adult females. The literacy rate of young people aged 15 to 24 i.e. 83%^[51] (World Bank, 2023).
34. Without education, women are forced to work in the low-productivity agricultural sector and in the informal economy. The participation rate in the total labor force in 2021 was 76.9 per cent.^[52] In addition, women have less access to productive inputs and credit than men, which is particularly important for farmers and entrepreneurs. Few women are landowners, even though they do 70 per cent of traditional subsistence agriculture and 24 per cent of commercial agriculture^[53].
35. **Rural women's constraints.** Women in rural areas constitute 70 per cent of the small-scale subsistence farmers and almost contribute all the labour. Despite their important role in agriculture and fisheries, women are often poorer and more vulnerable than men. Extreme poverty and women's poverty are strongly linked in most situations. Indeed, many women share the same problems as poor men in rural areas, but they contribute less means/assets. As a result, their ability to defend their rights and overcome challenges is limited. The average income of women is about two-thirds of that of men^[54]. Women's gross national income (GNI) per capita (USD 4,751) is lower than men's GNI per capita (USD 6,197). On the ground, there is a low level of social ownership of the gender approach, as well as the persistence of cultural dispositions that are harmful to women, particularly with regard to access to technology, inputs, land, credit and support services.
36. In addition, rural poverty is a determinant of the persistence of early marriage in the country. Indeed, child marriage, which is often a socio-economic adjustment strategy endorsed by social norms and customary law, is more common in rural areas and among the poorest families, whose members have had limited access to education. In total, 30.3 per cent of women aged 20 to 24 were married or in a relationship for the first time before the age of 18.^[55] Violence against women and girls is a serious problem in Angola. In fact, one in three women is a victim of physical violence in her lifetime^[56]. More than 41 per cent of women and girls aged 15 and older who have ever had an intimate partner have experienced physical, sexual or psychological violence^[57].
37. **Women heads of household are particularly vulnerable.** Women-headed households constitute 51.8 percent of the households (consisting of 51.4 percent in urban areas and 52.2 percent in rural areas)^[58]. Poverty is more prevalent in rural areas and more so in female-headed households and mostly affects single mothers, widows and the elderly. Many women are also defacto head of household because of being members of polygamous households, male labour migration or conscription. Existing social norms negatively affect women's participation in all productive activities and constrain their voice in decision making, and influence in household expenditures and at community level. Women are more likely to be poor and illiterate and have low access to medical care, property ownership, credit, training and employment. Cultural norms keep women in subordinate positions perpetuating inequality between men and women. In addition, gender-based violence against women and girls is high but few cases are reported to the police. Women in the drought-stricken areas bear the brunt of climate change. Women and girls walk for long distances to fetch water. At the same time, women are marginalised in decision making positions in water point groups, even though the women are primary managers of household water.
38. In total, several constraints exacerbate gender inequality: access to productive resources (inputs, finance, and knowledge), lack of access to education, market access, drudgery, drought and low income and employment opportunities. Gender gaps in access to resources (such as agricultural production factors and employment and education have long term impacts on family incomes and structural transformation. Men own the means of production (land, livestock and finance) and women provide most of the labour (for crop cultivation, conservation, processing, marketing of food crops and family nutrition security).
39. **Women's access to production factors and markets.** Access to land largely determines women's ability to access input and financial markets, as well as their power to influence economic decisions in the household. However, the large number of female-headed households in rural areas also indicates that women are vulnerable in the process of obtaining access to land and also in obtaining the right to small-scale fishing, even though the legal provisions grant the same rights to all segments of Angolan society^[59].

40. In Angola, although the new Land Law recognizes women as co-owners of land and with equal rights to men in terms of ownership and use of land, at the institutional level local administrators and public officials, responsible for complying with the norms of the new law, rarely have the knowledge of, the desire or authority to apply them^[60].
41. Despite being the least empowered members of a rural community, their contribution to the family's economic activities and food security is disproportionately high. Many women are without husbands and therefore at the head of their families. Rural households are heavily dependent on women's food production and whenever possible, on the marketing of surplus agricultural products^[61]. There are few economic alternatives for rural women outside of agriculture. Collecting firewood is primarily the responsibility of women and children. The scarcity of this product leads them to travel long distances or buy firewood or charcoal, which increases household spending and further reduces disposable income^[62].
42. Women's access to land ownership and finance^[63], as well as capacity building in their functions in the fisheries and aquaculture value chains (particularly in the area of processing and marketing), can further contribute to income generation and the reduction of the gender wage gap. In other words, strengthening the economic potential of rural women through economic activities on a larger scale therefore makes them a key element in the fight against poverty and improving the food security as well as the well-being of rural families in the project area. Improvements in fishing technology and methods, especially aquaculture, will contribute to poverty reduction and gender-sensitive development of rural areas.
43. Overall, women face many constraints that limit their ability to seize the opportunities available to them to ensure their empowerment at all levels. Women face daily challenges in balancing domestic and economic responsibilities. In rural areas, women tend to work 1.5 to three times longer hours than men. This translates into less time for income-generating activities, rest, recreation and participation in community events. On average, they spend 8.2 hours more per week than men on unpaid domestic work. These issues will be addressed by the project in terms of targeting, social inclusion and Women's Economic Empowerment through an operational plan that will be developed with all stakeholders at the beginning of the project. For all field activities, 40% of target households will be female-headed. The project will also strengthen women's and girls' leadership and participation in decision-making at community level and beyond and support the government in disseminating its legal and normative instruments to create an enabling environment for gender equality.
44. **Gender and vulnerability in the fisheries and aquaculture sector in Angola.** The fishing sector is generally dominated by men in Angola. Men are more numerous in almost all links in the fisheries supply chain (including small-scale fisheries) as well as in aquaculture. They have a strong presence in the fishing, transport and large-scale distribution of fresh and processed fish. Inland fisheries employ approximately 20,000 people, of whom 8 per cent are women^[64]. Over 90 per cent of employment in fisheries and aquaculture is in small-scale fishing^[65]. Women account for 50 to 80 per cent of people involved in post-harvest activities^[66]. In agriculture and fisheries (which together account for more than half of all jobs), women make up 54 per cent of the workforce. Currently, most working women are involved in retail trade and agriculture, 79 per cent of them are engaged in self-employed activities^[67].
45. Specifically, women are more present in small-scale fisheries. They are primarily involved in the purchase, processing and sale of fish and in some cases, freshwater fishing^[68]. In terms of valuation, women account for 80 per cent of small-scale fish processors and sellers (UNCTAD, 2023). The industrial segment also employs women^[69]. Processed fish is usually packed in bags and transported by pick-up trucks to fish markets in villages, or to larger towns and cities. In inland areas, bicycles are also used for transportation. Most fish markets are found in the more densely populated regions. Artisanal fishermen and women generally supply fish to local markets. Although it is men who go to catch the fish, it is women who process, market and sell the catch.
46. In fish processing activities, women use traditional methods that have a detrimental effect on natural resources and do not allow for the expansion of these activities because of the time required for the whole process. In addition, post-harvest losses are high, as the artisanal sector does not have access to clean or safe drinking water, electricity, ice and storage facilities, roads and the cold chain for transportation to lucrative markets. Women processors are subject to unhygienic post-harvest practices that pose risks to food safety and the quality of the product consumed or offered for sale.
47. In addition, women (especially the most vulnerable) have a harder time obtaining food and household purchasing decisions are mainly made by men^[70]. Yet, according to the gender division of labor in fishing communities, women are also responsible for household food security. To do this, they can use traditional fishing methods to provide fish for household consumption. As a result, fisheries resources are insufficient and inadequate for household consumption and nutrition (especially in rural and non-coastal areas).
48. Overall, the high level of poverty of small-scale fishing communities and the adaptation strategies they adopt disperse their capacity to invest in the fisheries sector, particularly aquaculture and do not allow them to raise production levels to position themselves in more demanding structured markets. The market roads and infrastructure are in a state that deserves to be repaired in order to open up the production areas and increase the possibilities of access to markets for the target groups. In addition, the costs of entry into the professional aquaculture activity are very high and hinder the initiative of young people and women wishing to set up in this segment of activity. Young people and women in general, and more particularly in small-scale fishing communities, lack start-up capital for developments, equipment and working capital. They also lack the skills to professionalize in this sub-sector and in the management of a fishing operation (whether artisanal or not) or a market-oriented aquaculture enterprise.
49. The project will work to strengthen equity in access to resources and benefits facilitated through the support and ensure capacity building for women in various fields to increase their technical capacity to effectively conduct their activities in the field of

fisheries and aquaculture. Capacity building will include (i) agency (capacities, skills, confidence), (ii) change in relationships within the household and at the community level, (iii) transformation of structures (basic institutions, production and management organizations including markets, social norms^[71] facilitating progress towards gender equality, and the empowerment of women and youth). Overall, the constraints will be addressed by the empowerment of women and men through the Gender Action Learning System (GALS) to challenge the social norms that remain a barrier to the achievement of gender transformation. Other measures to be considered include, capacity building, literacy training, introduction of labour-saving technologies, involvement of women in management committees, income generation activities and advocacy, provision of drip irrigation, wheelbarrows, childcare facilities among others.

c. Youth

50. **Youth constraints and challenges.** Youth are defined as people aged 15 to 35 years^[72]. Angola is a youthful country with 19 per cent of the population aged 15-24 years and 66 per cent of the population being less than 25 years old. In both the Northern and central provinces of Bie, Bengo, Uige, Malanje and Cuanza Norte, 35 percent of the population are youth^[73]. The youth face many challenges in areas of education, employment, access to productive resources (land and finance), lack of decision-making roles, lack of entrepreneurial skills and basic nutrition.
51. The proportion of unemployed young people without education or vocational training has increased. In particular, the unemployment rate for young people aged 15 to 24 is 52.9 per cent, which is higher^[74] than the national unemployment rate^[75]. The highest unemployment rate is observed for people whose educational level corresponds to the secondary cycle of general school education (that is about 35%). Young people predominate in informal employment (95.2% for young women and 91.3% for young men)^[76]. Young people in rural areas lack appropriate qualifications and/or training, particularly in fisheries and aquaculture. These factors are crucial to their employability and productivity on the labor market and to the development of small-scale aquaculture and inland fisheries value chains. Faced with a lack of opportunities in rural areas and difficulties in accessing productive resources, young people migrate to urban centers, where they eke out a living in low-paid informal sector jobs and face a multidimensional crisis characterized by delinquency, various diseases, increased unemployment and underemployment. The youth are less attracted to agriculture since they prefer enterprises with quick returns. Among the San communities, youth participation in agriculture varies, with some interested in the quicker results and gains from horticulture.
52. The Angola-2050 Strategy addresses the issue of youth in a cross-cutting way, providing this category with the necessary instruments to succeed in the field of entrepreneurship. The state makes reducing youth and adult illiteracy a priority in the National Development Plan 2018-2022 and sets out medium-term strategies to expand access to and promote quality education.
53. Strengthening the capacities of young people to increase their employability, particularly in the aquaculture sector, is a major challenge for reducing poverty and household food and nutrition insecurity at rural level and contributes to maintaining cohesion and social peace in the country. The socio-economic integration of young people will be achieved by creating opportunities in aquaculture and related professions that are accessible to young people and that meet their needs, by strengthening their economic power, following up and supporting their installation and providing close follow-up to prevent them from dropping out. At least 40 per cent of the beneficiaries of the project's activities will be young people, of whom at least 30 per cent will be young heads of household or farm managers. The project will strengthen the capacities of national institutions and youth organizations in charge of promoting the economic integration of young people.

d. Indigenous peoples

54. **Indigenous peoples (IPs):** There is limited information on the existence of marginalised groups in Angola. The GoA does not recognise the concept of indigenous peoples (IPs) and there is no reference to IPs in the Constitution. The marginalised groups in Angola include the San and Himba and other smaller groups (Kwisi, Kwepe, Kiwali and Zemba). The San and Himba are situated mainly in the southern province of Huila, Cuando Cubango and Moxico. The Kwila, the Kwele and Zemba who speak the Herero language.
55. The total population of the marginalised is estimated to be 25,000^[77]. Many of the marginalised people still live as hunters-gatherers, staying in rudimentary shelters and moving in their ancestral territories, while others have settled in homesteads where they practise agriculture, surrounded by Bantu neighbours. The San are estimated at 0.1 per cent of the population of Angola^[78]. The San live on state land without title or in the same areas, where they have leasehold established. There is low level of employment and the San occasionally work as casual labour on people's fields in exchange for food.

e. Marginalised groups

56. The marginalised people consist of People with Disabilities (PWD), ex-combatants displaced and landless people.
57. **Marginalised People (PWD).** Regarding people living with disabilities. There are 658,258 PWD in Angola (365,547 urban and 290,710 rural)^[79]. The prevalence of disability was 2.5 per cent with 56 per cent male and 44 per cent women. Of these, 56 per cent reside in the rural areas. The most prevalent forms of disabilities include mental (10 per cent), sensory (28 per cent), and motor disability (62 per cent). The long civil war has caused several physical and emotional stress resulting in human handicap. Since 2011 the government has set up a law on social inclusion of handicapped children and the regulation on open spaces and walking places for handicapped persons. These handicapped persons are also organised into 18 federations and associations to represent their social categories and advocate for more support from the state and development partners.
58. **The main problems include:** health, education, access to information, drinking water and decent housing, economic and social conditions, water and hygiene, (difficulty to access due to distance and physical barriers.). Other problems include low levels of social awareness, preventing PWD from recognising their abilities and skills, which otherwise have allowed them to carry out activities and marginalisation. PWD face extreme poverty due to lack of sufficient resources, loss of property after acquiring disability and lack of social protection.
59. The response of the government has been in terms of access to information, education, vocational training, empowerment and rehabilitation through training, employment opportunities, consumption and social security. In May 2014, the GOA ratified the Convention on the Rights of Persons with Disabilities (CRPD) and developed a framework to provide various support to the disabled including the rapid establishment of the National Council for persons with Disabilities. A 2016 law on disability aims to promote the employment of people with disabilities through the introduction of quotas, the facilitated issuance of credits for people with disabilities and free vocational training. In addition, in all housing projects built with public funds, a minimum of 5 per cent must be adapted for people with disabilities. In order to ensure the effective participation of persons with disabilities, the Government has subsidized several associations of PWDs, which are recognized as being of public utility.
60. Participation as a measure to guarantee the development of PWD in all areas of their personal life, social integration through agriculture production, animal husbandry and professional training^[80]. The project will create employment for women, men and the young people with disabilities. Through AFAP-2, it is envisaged to target 5 per cent of PLWD among the beneficiaries. The project will rely on associations of PLWDs recognized as being of public utility to reach this specific target group and provide adequate responses to their specific constraints within the framework of the activities to be carried out. The rapid characterization study of the fisheries and aquaculture basins to be carried out will be extended to the profile of favorable activities to ensure the socio-economic inclusion of PLWDs (both men and women) in the AFAP-2 project areas.
61. **Ex-combatants:** The civil war that lasted from 1975 to 2002, resulted in the demobilisation of close to 80,357 ex combatants in all the 18 provinces of Angola. In 1995, GoA created a Ministry in charge of Former Combatants and Motherland Veterans. In order to support the socio-economic integration of the ex-combatants, an Inter-Ministerial Commission for Coordination of socio-economic Reintegration Actions of Ex combatants and Homeland Veterans Integrating various ministerial departments was put in place to support these sensitive and fragile categories in the areas of: health, finance, agriculture and social affairs.

f. Nutrition

62. Angola ranks 97 out of the 116 qualifying countries in the 2021 Global Hunger Index with a score of 26^[81]; this implies that the country "suffers from a level of hunger that is serious". Malnutrition remains a pervasive challenge, UNICEF estimates 3.9 million had severe acute malnutrition admissions among 6 to 59 months old children in 2021. Angola has made no progress towards achieving the target for stunting.
63. Chronic malnutrition affects almost every province in the country. The rural areas have more chronic malnutrition (46%) compared to urban areas (32%)^[82]. The prevalence of stunting is 38 per cent overall and 47 per cent in the poorest households^[83]; these rates are higher than the average for the African region, which is 30.7 per cent^[84]. This is due to inadequate dietary diversity, food insecurity, high poverty and insufficient access to key social services. As of March 2022, 1.58 million people were in IPC Phase 3 and above. Of this population, an estimated 417,000 people were facing IPC Phase 4 (emergency) and had difficulty accessing food or could not meet their minimum food needs. The majority, 73 per cent of the rural population, does not have access to basic drinking water on their premises^[85]. The country has significantly improved its hunger index from an alarming extreme situation (GHI in 2000 is 64.9) to a situation of moderate hunger (GHI in 2023 is 25.9)^[86]
64. The stunting rates remain very high in most provinces: Bie 51%, Bengo 40%, Malanje 32%, Cuanza Norte 45% and Uige 42%^[87]. Undernourishment affected 17 per cent, wasting 8.2 per cent^[88], and overweight affected 3.4 per cent (2015)^[89] of the children under 5 years in Angola. In addition, the prevalence of thinness (10.6% for boys and 5% for girls), overweight (16.9% girls and 8.7%) and obesity (3.8% girls and 2.4% boys) in children and adolescents (aged 5-19 years)^[90], show that the boys are thinner, less overweight and less obese than girls. The infant and child feeding practices are poor with 37.4 per cent of infants aged 0 to 5 months being exclusively breast fed, and an estimated 14.5 per cent of adult women and 5.2 per cent of adult men living with obesity,^[91] which features predominantly among urban dwellers.
65. Micronutrient deficiencies are pervasive: Anaemia affects 65 per cent of all children under five years and 44.5 per cent of women in the reproductive age bracket (15- 49)^[92], almost two-thirds of preschool aged children are Vitamin A deficient, 20 percent of

children are at the risk of developing iodine deficiency disorder and half the population is at risk of inadequate zinc consumption^[93]. More than 30 per cent of the population consume less than three meals a day^[94]. An estimated 7.3 million people in Angola were facing food and nutrition insecurity due to climate shocks. Southern Angola and bordering Provinces, including Bie Province have faced consecutive drought conditions. As per food Security Phase Classification analysis, 1.58 million people faced acute levels of food insecurity in March 2022^[95].

66. Angola is facing several public health problems. Infant mortality is 44 out of 1000 live births. About 44 per cent of the population lack adequate safe drinking water^[96]. The lack of water and sanitation and poor hygiene practices are the main causes of infectious diseases contributing to malnutrition and infant mortality. The prevalence of HIV/AIDS is low at 2 per cent^[97] with inadequate transmission prevention measures, malaria, acute respiratory infections, diarrheal disease, tuberculosis, and trypanosomiasis account for seventy per cent of all deaths. Diabetic prevalence is 4.6 percent of the population (aged 20-79 years)^[98], affecting 9.8 percent of adult women and 10.9 percent of adult men^[99]. Women's role in food utilisation is critical, as they are responsible for food processing and preparation and therefore are crucial to the dietary diversity of their household and overall family nutrition status.

67. Major food and nutrition security challenges and the project's response

68. **The underlying causes of undernutrition, food insecurity and poor dietary diversity** include: high poverty levels, limited availability, accessibility, affordability of more varieties and diversity of safe and nutritious foods by rural poor households, poor sanitation and hygiene conditions, high unemployment, low literacy levels and gender inequality. The food security situation has been exacerbated by consecutive drought in multiple parts of Angola, low crop yields and poor harvest, depleted resources, loss of livelihoods and livestock, rising food prices, lack of water and sanitation, and increasing pests/diseases infestations. Inadequate care and poor feeding practices causes malnutrition in children, while the high prevalence of waterborne diseases is due to lack of access to safe water and sanitation particularly among fishing communities. Families, mothers in particular, need to know the special nutritional needs of growing children and how best to meet those needs with available resources. Families must learn not only to eat well themselves but also become sources of sound information on good health and nutrition. Those who provide advice on agriculture must know what crops can easily be grown to make quick and crucial improvements to family meals or to enrich children foods and must see the urgency of sharing this knowledge.

69. The critical window for adequate child growth and cognitive development is the 1000 days between conception and 24 months of age. If children are poorly nourished during this period they do not grow and develop well physically or mentally and can also become overweight adults with chronic health problems. In order to ensure good maternal and child nutrition, nutrition education is needed as a priority for adolescent girls and women of reproductive age. Local diets need to be optimised and linked with fisheries interventions to ensure access to high quality, safe and nutritious foods that are critical for maternal nutrition and child health, especially micronutrient-rich vegetables and fruits, legumes, and animal source foods (viz. poultry, fish, eggs). Also, intensive complementary feeding education on how to prepare nutritionally adequate and safe foods for young children is required. It is important to promote good family and child feeding through sharing knowledge and skills on how to how to optimise the use of locally available and or affordable foods.

70. **The nutrition indicators** include: Improved Knowledge, Attitudes and Practices (KAP) of food, feeding, caring and hygiene; and Minimum Dietary Diversity score for Women of reproductive age (15-49 years) (MDD-W). KAP is an indicator that measures the outcomes of nutrition education, counselling, behaviour change communication, cooking demonstrations among others. The MDD-W measures the dietary diversity of women to assess their diet quality. It is a proxy indicator to judge adequacy of micronutrients consumption by women and a proxy to gauge the adequacy of nutrition intake of household members.

71. Detailed project intervention on nutrition

72. **AFAP-2** is a nutrition-sensitive project and will seek to use an integrated approach focusing on prevention to improve the nutritional status of target nutritionally vulnerable beneficiaries. This approach will be " household and community-based nutrition" in order to respond more effectively to social issues and the acute problems of chronic malnutrition in all the intervention areas. The main activities will focus on a) the integrated homestead food production for household consumption and selling surplus at local markets; b) the conservation, processing, marketing and consumption of fish and fishery products; c) social behaviour change communication and targeted nutrition education to promote dietary diversity for nutritionally vulnerable people; d) economic empowerment of women through support for their economic initiatives; and e) nutrition-focused aquaculture and fisheries interventions (such as "nutri-ponds" associated with home gardening and poultry rearing, etc.). Support will be provided at two levels: the community level, targeting households directly and the institutional level.

73. **At community level.** The project will provide direct support for specific information, nutritional education and awareness-raising activities on the importance of dietary diversification, which will be carried out in all the provinces, municipalities and support localities in order to promote the adoption of good nutritional and food hygiene practices. The support to be provided to beneficiary households at community level is part of a continuum of interventions starting with: a- awareness-raising campaigns, b- training and support for setting up an activity (of an economic nature) in the field of aquaculture and small-scale continental community fishing, d- education in the best nutritional practices and in adequate maternal and child health care, hygiene and sanitation to reduce malnutrition in all its forms, e- monitoring and support for the development of activities. The project will also focus on connecting the promoters of nutrition-sensitive economic initiatives to markets (inclusion in commercial partnerships, marketing, etc.) in order to bring them out of their state of vulnerability in the long term.

74. The actions to be carried out include the general social mobilisation of the populations in the project intervention zone for the adoption (on a large scale) of good practices in terms of nutrition, hygiene, sanitation of the living and working environment. This mobilisation will be encouraged and strengthened by communication, awareness-raising and training activities on nutrition. The following actions will also help to strengthen social mobilisation: (i) the composition/production and preparation of meals (public

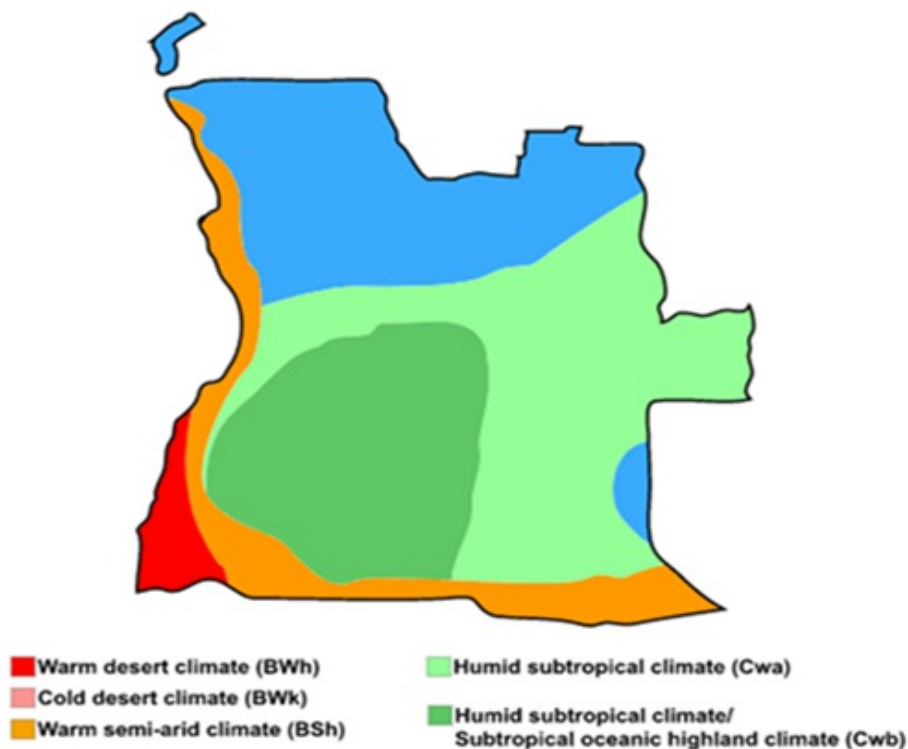
culinary demonstration and improved food recipes) and (ii) the organisation of interactive nutrition events with media coverage (radio broadcasts, nutrition caravans, etc.), with or without prizes for the best composition of a meal, the Angolan nutrition cuisine day, the best ADECOS nutrition agent, the best "nutri-light parent", etc., and (iii) nutrition training to farmers using FFS.

75. ***At the institutional level.*** The project will provide institutional support on nutrition, through participation in dialogues on nutrition through the contribution to the nutrition conference and participation in the consolidation of the multi-stakeholder platform, support through its interventions for the achievement of the indicators of the national strategic plan and the operational plan that will result from it during the implementation of the project, as well as the contribution to the nutrition aspects of the " Food Security and Nutrition Information System (FSIS) at the provincial level (establishment and feeding of a database of nutritional indicators in the project area). In its implementation, the project will seek to establish synergies and complementarities with other nutrition interventions in the same area. The project will strengthen the capacities of the provincial departments of the National Council for Food and Nutrition Security in order to (a) optimize the coordination of nutrition activities that will be supported by AFAP II, (b) improve the capitalization of the project's contribution to the implementation of the National Action Plan for Food and Nutrition Security, and (c) monitoring the evolution of nutrition indicators in the five provinces of intervention concerned.
76. The coordination and facilitation of the implementation of nutrition interventions will be the responsibility of the Nutrition and Social Inclusion Specialist (women, youth and persons with disabilities). In addition, a baseline study on the nutritional situation and gender equality in the project's intervention areas will be included in the project's pre-start-up activities. This study should include surveys to assess the Minimum Female Dietary Diversity (MDD-W) score^[100] and the assessment of the level of women's empowerment in the fisheries subsector (Project level Women's Empowerment in Agriculture (WEAI)).^[101] These instruments will help the project identify actions that will serve as a lever to strengthen social inclusion, women's economic empowerment and food and nutrition security within households in the intervention area. Impact studies of the activities on malnutrition rates in the target areas will be carried out at the mid-term and at the end of the project.

2.2 Environment and climate context, trends and implications

77. **Geographical location:** [Angola](#) is located on the western [Atlantic Coast](#) of [Southern Africa](#). It also is bordered by the [Democratic Republic of the Congo](#) and [Zambia](#) to the east and Namibia to the south. The country consists of a sparsely watered and somewhat sterile [coastal plain](#) extending inland for a distance varying from 50 to 160 km. Slightly inland and parallel to the coast is a belt of hills and mountains and behind those a large plateau. The total land size is 1,246,700 km². It has an [Exclusive Economic Zone](#) of 518,433 km² (200,168 sq. m).
78. **Angola natural regions:** Angola has four principal natural regions: the arid coastal lowland, stretching from Namibe to [Luanda](#) and characterized by low plains and terraces; green hills and mountains, rising inland from the coast into a great escarpment; a large area of high inland plains of dry [savannah](#), called the high plateau (planalto), which extends eastward and south-east from the escarpment; and [rain forest](#) in the north and in [Cabinda](#). The highest point in Angola is [Morro de Môco](#), at 2,620 m. Elevations generally range from 910 to 1,830 m (3,000 to 6,000 ft).

79. **Figure 1: Angola natural regions**

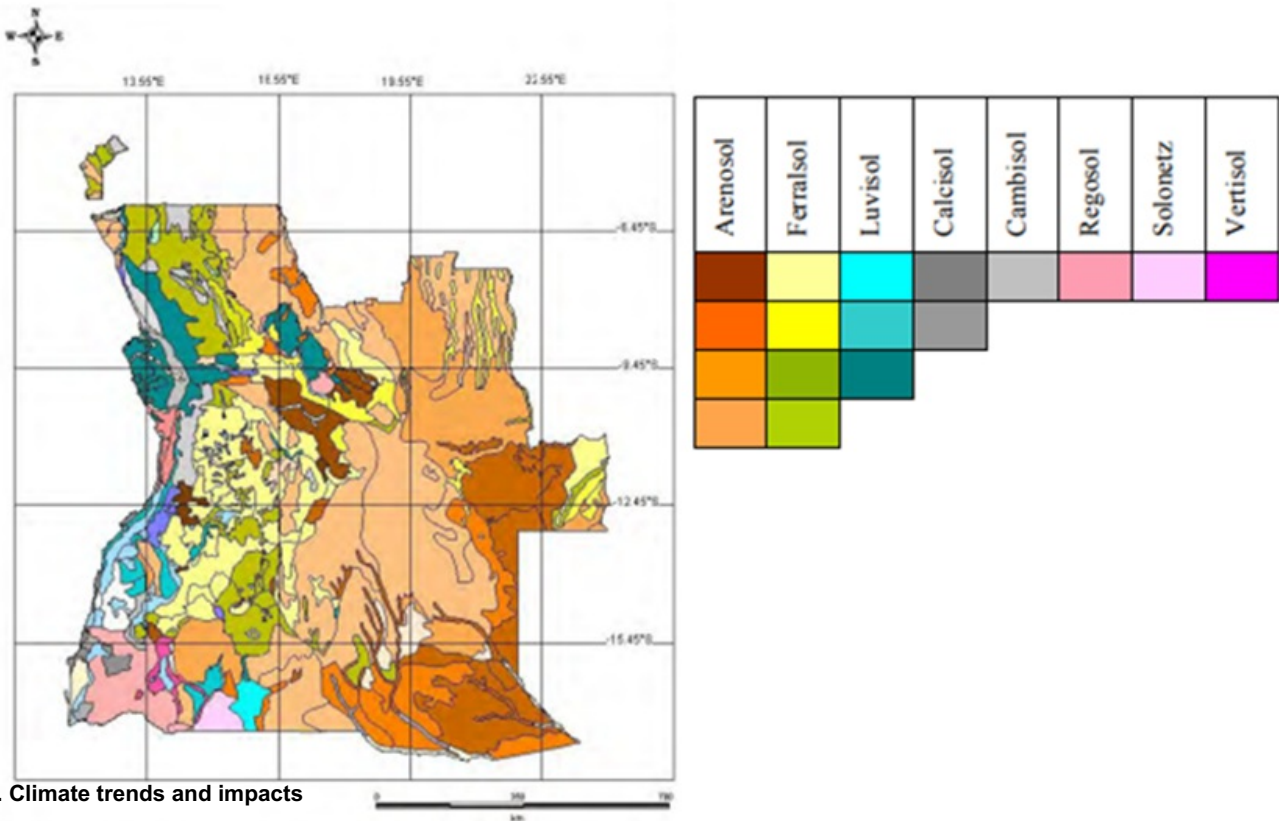


Environment: Angola's rainforests, located in the north of the country, are most threatened by subsistence agriculture, which provides food for almost 90 percent of the population. Overgrazing and cutting forest for fuelwood are also significant causes of forest clearing and degradation. Three million acres of land are considered to be forests (43.3 per cent of the national territory). Only two per cent is comprised of dense, humid, high productivity forests, very rich in biodiversity. Approximately 65.2 per cent is comprised of a mosaic of forest and savannah, as well as open forests called miombo, with medium productivity of wood but socially and economically important to produce wood fuel, construction materials, medicinal plants and non-wood products for food. The remaining percentage is occupied by dry savannah, with sparse trees and/or bushes, desert and sub-desert steppe of low productivity. The wood chopping capability in the country's natural forests is 333,000 m³ per year, which can allow the transformation of 1,150m³ /day of chopped wood.

Environmental challenges: Angola faces a range of environmental challenges that have significant implications for its ecosystems and communities. Deforestation is a major concern, driven by factors such as agricultural expansion, logging and charcoal production, leading to habitat loss and degradation^[102]. Soil erosion and land degradation are prevalent issues, exacerbated by unsustainable land management practices, which further threaten agricultural productivity and natural resources^[103]. Water pollution is a growing problem, with industrial activities and inadequate waste management contributing to the contamination of water sources and posing risks to public health^[104]. Climate change impacts, including changing precipitation patterns and extreme weather events, also pose additional challenges for agriculture, water availability and coastal areas^[105]. Addressing these environmental challenges in Angola requires effective policies, sustainable resource management and community-based initiatives to safeguard its ecosystems and promote a more resilient and sustainable future.

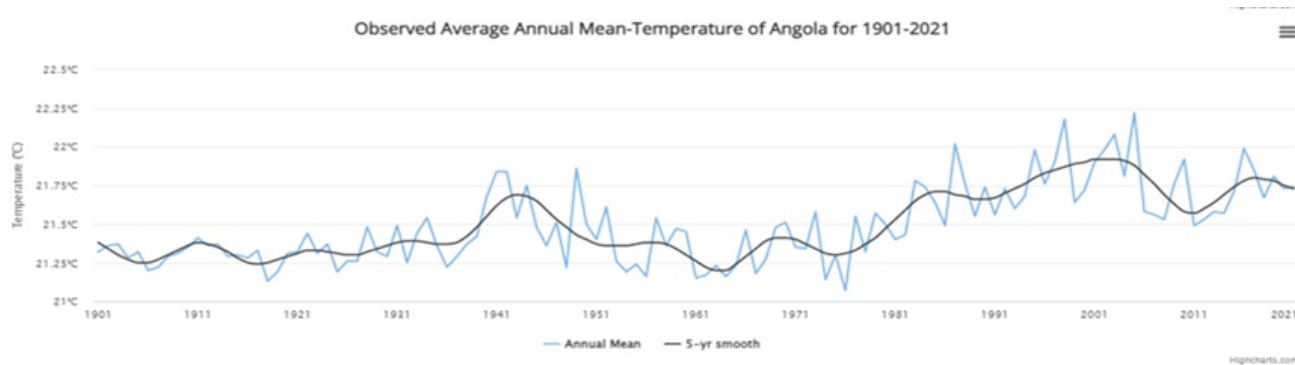
a. Environmental assessment

80. **Biodiversity:** Angola, possesses a rich and diverse biodiversity with a wide range of ecosystems supporting unique flora and fauna. The country's tropical rainforests, expansive savannas, wetlands and coastal areas are home to a plethora of plant and animal species. Angola's biodiversity is characterized by numerous endemic and rare species, making it a region of high conservation value^[106],^[107]. Notable wildlife found in Angola includes African elephants, black rhinoceroses, lions, giraffes, and various bird species such as the Angolan cave chat and Gabela akalat^[108]. The coastal waters of Angola also support diverse marine life, including humpback whales, leatherback turtles, and various fish species. Despite its natural wealth, Angola's biodiversity faces threats from habitat loss, deforestation, poaching, and the impacts of climate change^[109]. To preserve its unique natural heritage, concerted conservation efforts, and sustainable management practices are crucial for the future well-being of Angola's flora and fauna^[110] (WWF, 2021).
81. **Forests resources:** Angola's, forests cover close to 18.4 per cent of the nation's total area and form one of the country's most critical natural resources. Angola's forest resources play a significant role in the country's biodiversity and natural heritage. The forests of Angola encompass a variety of ecosystems, including tropical rainforests, woodlands and savannas, which support a diverse array of plant and animal species. These forests provide essential ecosystem services, including carbon sequestration, soil conservation and water regulation. However, the country's forest resources face significant challenges from deforestation, illegal logging, and land-use changes, which can lead to habitat loss and environmental degradation^[111]. Sustainable forest management and conservation efforts are crucial to preserving Angola's forest resources for future generations and ensuring the ecological balance and livelihoods of local communities that depend on these ecosystems.
82. **Wildfires:** Angola has experienced wildfires that pose significant threats to its forests, wildlife, and ecosystems. These wildfires can be sparked by both natural causes, such as lightning strikes and human activities, including slash-and-burn agriculture and land clearing practices^[112]. Uncontrolled wildfires can lead to extensive forest loss, habitat destruction, soil erosion and air pollution, adversely impacting biodiversity and contributing to climate change through the release of carbon dioxide and other greenhouse gases^[113]. As climate change exacerbates drought conditions and increases the frequency and intensity of wildfires, it becomes crucial for Angola to implement effective wildfire management strategies, including early warning systems, firefighting capabilities and public awareness campaigns, to mitigate the impact of wildfires on the country's natural resources and protect its ecosystems.
83. **Soils:** The two dominant soil groups are Arenosols and Ferrasols (Figure 2). Arenosols dominate the eastern two-thirds of the country, where the parent material consists of coarse-textured sediments. Ferrasols occupy large portions of the western highlands and adjacent areas. These two infertile soil groups cover more than 80 per cent of Angola's surface. Other important soil types include Luvisols, Calcisols, and Cambisols. The Luvisols are common in the northeastern hills and adjacent slopes where coffee cultivation used to be an important activity during colonial times. This area is now covered by dense forests that support a healthy population of small antelopes and avian fauna. Because of its relatively high agricultural potential, the opportunity cost of conservation in these fertile areas is higher than in areas dominated by Arenosols, where cultivation is a marginal activity at best.
84. **Figure 2: Generalized soils map of Angola**

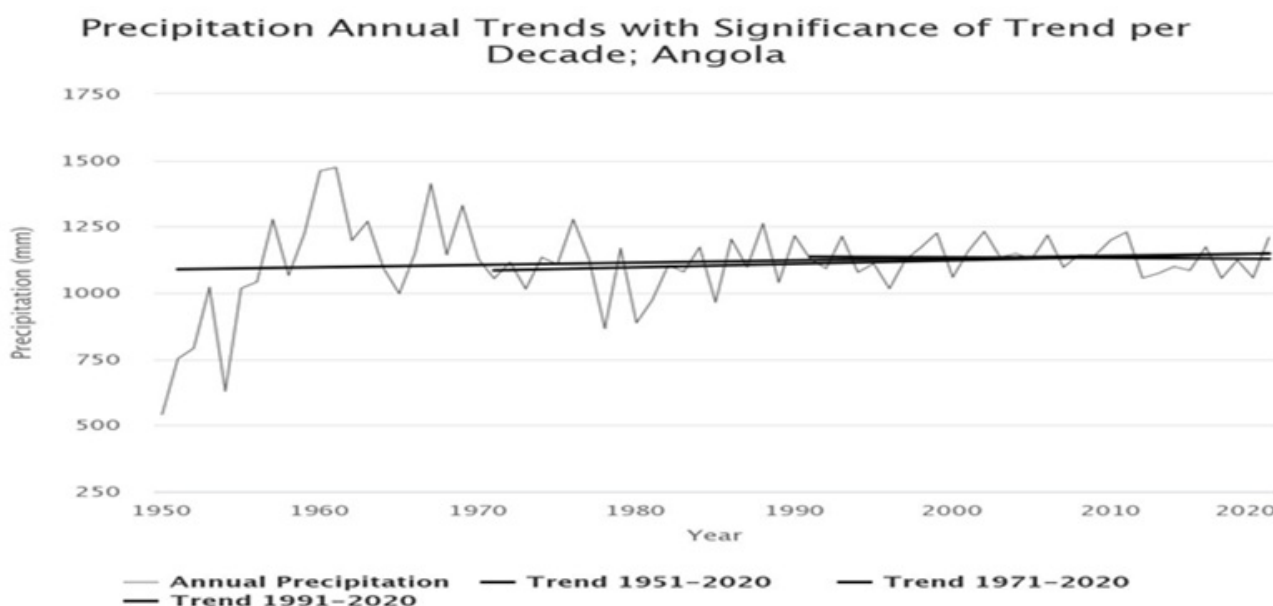


87. **Climate:** Angola has a tropical climate with wide variations in rainfall amounts and duration across different parts of the country. Rainfall is a key determinant of climatic differences in the country. The country experiences distinct seasons of alternating dry and rainy periods. The climate in the country is influenced by the cool sea currents especially along the coast and similarly by the altitudes in the plateau found in the interior part of the country. Rainfall decreases rapidly from North to South between the Atlantic coast and the country side. The altitude invariably decreases from the Northeast to the Southeast, from 1,500 to 900 metres, which causes the change of rainfall from 1,000 mm to 600 mm. The country's water infrastructure is old and largely systems are often inadequate, resulting in limited access to clean and safe drinking water for a significant portion of the population. According to a report by UNICEF and WHO, as of 2019, only about 55% of the population in Angola had access to improved drinking water resources [114]. On all the major rivers, the water sources are contaminated, leading to waterborne diseases and health issues. Addressing water scarcity and improving access to clean water is crucial for enhancing rainfall, reducing poverty, and promoting sustainable development in Angola.
88. Rainfall also decreases from the Northwest to the Southeast from the level of 1,400 to that of the annual 600 mm, so the climate changes from "humid" in Menongue to "semi-arid" in Mucusso, where the influence of the Kalahari Desert is well known. This is confirmed by the variation in temperatures, thermal amplitudes and the degree of humidity. In the same way, the soils have different agricultural aptitudes in the different parts of the country, the Northwest being the most suitable area for agriculture. There are two typical seasons: the rainy season, which runs from November to March, with April and October considered as months of transition; the dry season, which extends from May to August, with the months of June and July as the coldest months of the year. The duration of the rainy season is from September to May in the north and from December to March in the South. Rainfall variability from one year to the next is generally high with the Southern part of Angola being frequently affected by extreme weather events such as heat waves, droughts, floods and storms.
89. **Climate change:** Climate change is increasingly impacting Angola, posing significant challenges to the country's environment, economy and social well-being. According to the Intergovernmental Panel on Climate Change (IPCC), Angola, like many other African countries, is experiencing rising temperatures, changing precipitation patterns and more frequent extreme weather events such as droughts and floods [115]. These changes have direct implications for agriculture, water resources and food security, affecting rural communities that heavily rely on rain-fed agriculture for their livelihoods. Additionally, coastal areas are vulnerable to sea-level rise and associated risks, threatening coastal communities and infrastructure [116]. To address these challenges, Angola needs to implement adaptation and mitigation strategies, foster sustainable development and strengthen its climate resilience efforts.
90. **Current climate:** Angola's rainy season lasts from October-May and is characterized as hot and humid. The Inter-tropical Convergence Zone (ITCZ) controls rainfall as it moves between the equator and tropics, bringing rainfall to Angola as it migrates southward from the equator in October. The rains coincide with the warmest months of the year with average temperatures ranging from 22-23°C. The dry season, known as "Cacimbo," occurs from June-September and is the coolest time of the year, with average temperatures between 18-20°C. Total rainfall decreases as you move from north to south and from east to west in Angola, with northeastern Angola receiving the most amount of rain. Located along the Atlantic Ocean, much of Angola's climate is tied to sea surface temperatures and variations in the Benguela Cold Current.

91. Figure 2: Observed Average Annual Mean Temperatures for 1901-2021



92. Figure 3 Precipitation trends with significance of Trend per decade: Angola



93. Impact of climate change on Fisheries and aquaculture

94. Climate change is exerting significant impacts on aquaculture in Angola, posing challenges to the country's aquaculture industry. Rising sea levels and increased water temperatures are leading to changes in the coastal ecosystem, affecting the growth and survival of farmed species^[117]. Additionally, extreme weather events such as floods and cyclones can cause severe damage to aquaculture facilities and infrastructure, leading to economic losses. Changes in ocean chemistry due to increased carbon dioxide absorption are also impacting shellfish and other calcifying species, affecting their growth and development^[118]. To address these challenges, sustainable aquaculture practices, resilient infrastructure design, is crucial^[119]. Moreover, implementing adaptive measures and policies to mitigate climate change impacts on aquaculture will be vital for ensuring food security, livelihoods, and the overall sustainability of the aquaculture sector in Angola.

95. Fisheries sector

96. The fisheries sector in Angola is a significant contributor to the country's economy and food security. Angola's extensive coastline, rich marine resources and inland water bodies offer great potential for fisheries development. The sector primarily focuses on artisanal fishing, with small-scale fishers using traditional fishing methods to catch a variety of fish species. However, the fisheries sector in Angola faces challenges such as overfishing, illegal fishing and inadequate infrastructure and management practices. These issues can lead to the depletion of fish stocks and threaten the sustainability of the sector. To address these challenges and ensure the long-term viability of the fishery sector, Angola needs to implement effective fisheries management measures, promote sustainable fishing practices, and invest in infrastructure and capacity-building programs.

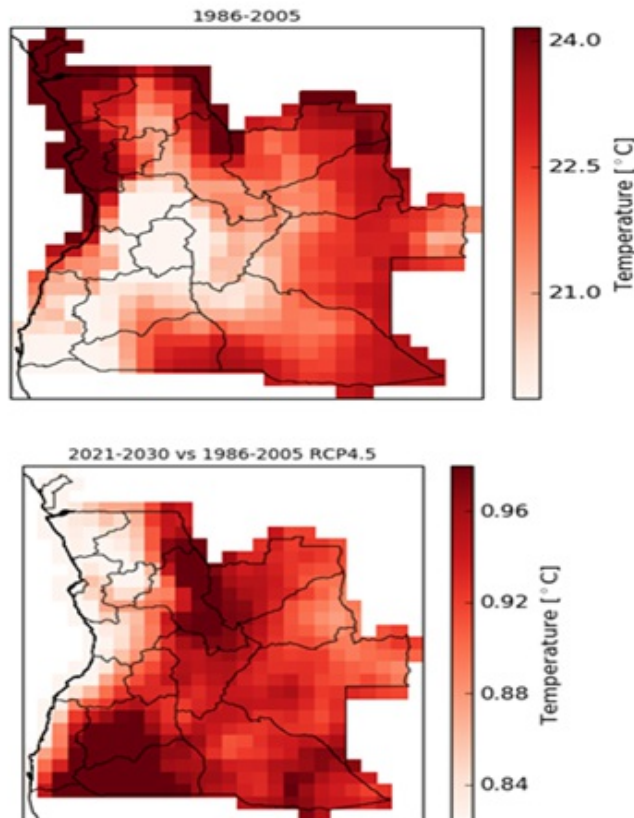
97. Climate projections

98. **Temperature:** Projections of maximum and minimum temperatures for Angola based on IPCC models and Representative Concentration Pathway (RCP) 4.5 indicate that mean annual temperature is expected to increase between 1.2°C and 3.2°C by 2060. The southeast inland areas are expected to experience the highest increase in maximum temperature, while projections for the northern coastal areas indicate a lower increase (Carvalho et al, 2017). Mean land surface temperatures are likely to

surpass the increase in global mean land surface temperature in all seasons over southern Africa and the projected warming of between 3.4-4.2°C, over this region, exceeds natural climate variability. Although rainfall models vary, there is broad agreement that rainfall levels will decrease in the future, with a stronger decrease in the southern part of the country.

99. **Figure 5: Temperature over the reference period 1986-2005. Projected change in temperature for 2021-2030 compared to the reference period 1986-2005.**

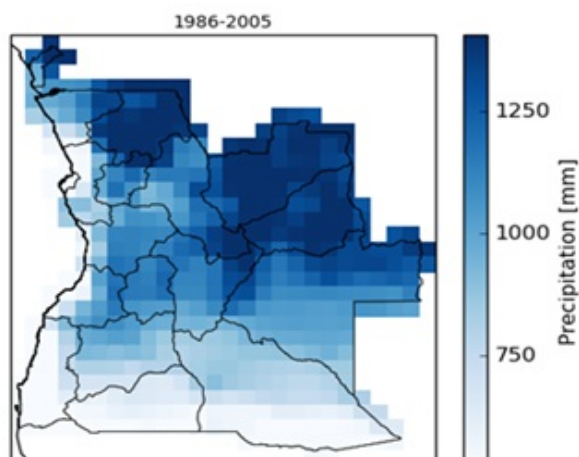
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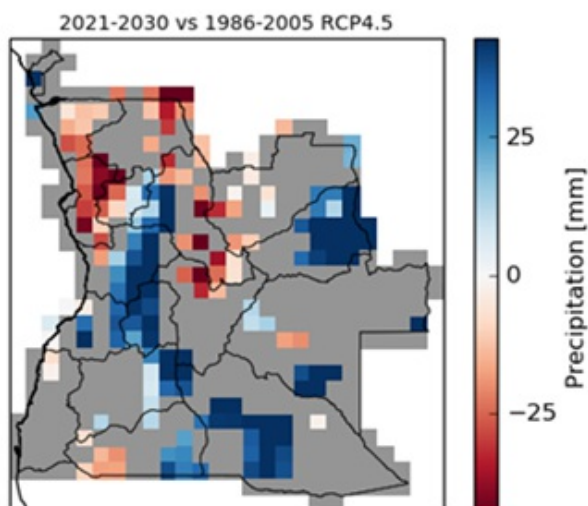


101. **Precipitation:** Precipitation projections for the country are highly variable, but generally, it is expected that precipitation will decrease by approximately two per cent by 2100, with a stronger decrease in the southern part of the country and during the dry months of the year (Carvalho et al, 2017). In the planalto region, it is projected that the start of the rainy season (September-October) will be characterised by reduced mean monthly rainfall by 2050, while the mid-summer (December-February) months across most of the region (with the exception of the southernmost extent of Huíla province) will likely be associated with increased rainfall. The last months (March and April) of the traditional maize-growing season in the planalto region will likely be associated with reduced rainfall in the south and east, while the central, western and northern areas will likely experience increased rainfall in this period (Hunter and Crespo, 2018).

102. **Figure 6: Precipitation sum over the reference period 1986-2005. Projected change in precipitation for 2021-2030 compared to the reference period 1986-2005.**

103.





104. **Future climate projections for the target area:** There is largely a consensus on temperature increase, rainfall variability and an increase in consecutive dry days. As such, models agree on temperatures rising faster than global averages (2.5°C compared to 1.5°C global). The South-western region of the Southern Africa Development Community Region is marked as a climate change hotspot by the IPCC SR1.5, indicating increased evapotranspiration caused by the higher temperatures, a significant decrease in precipitation of 10-20 per cent, and increases in the number of consecutive dry days. It is expected that populations and ecosystems in the CORB will be faced with an increased frequency of droughts, longer dry spells, and a reduced duration of the rainy season, up to 20 days in Southern Angola.

105. As rainfall is expected in shorter periods, an increased frequency in floods can be equally expected. Additionally, IPCC's special report on Land indicates the Southern African region, mainly South-west, at high risk of desertification, especially if unsustainable land management persists. Overall, drought and climate change have not only aggravated food insecurity, water pollution, human-wildlife conflicts, reduced fodder and pastures for livestock and wildlife, but have also reduced water availability and access due to drying up ground water recharge as well as land degradation (vegetation and soil degradation). Communities, individuals and especially small-scale farmers are vulnerable to droughts and climate change, their limited coping mechanisms coupled with limited knowledge, skills to undertake concrete adaptation actions to enable them to cope with droughts and impacts of climate change.

106. Socio-economic conditions are equally similar, with the populations depending on subsistence agriculture and nature-based livelihoods and sharing the same cultural backgrounds and languages. Geographically and socio-economically, the target areas are more coherent with each other than they are with their respective capitals.

c. Climate change mitigation

107. **Climate change mitigation:** Overall, the project will contribute to GHG emission reduction and sequestrations using renewable and energy saving technologies, lower emitting livestock such as poultry, Climate Smart Agriculture (CSA) practices including forestry and agroforestry and various watershed management activities.

108. **Adaptation:** The project will implement proven climate smart technologies such as conservation agriculture, composting, agroforestry as well as biophysical soil and water conservation. The project will also increase access to water and develop climate resilient infrastructure to enhance adaptation to climate change and build the resilience of communities and their livelihoods.

2.3 Target group profiles

109. The programme's geographic locations will build on provinces piloted under AFAP whose selection criteria was informed by: a) participatory management of inland fisheries which focused on Bengo, Kwanza Norte and Luanda provinces and b) piloting smallholder aquaculture models in Malanje Province. Guided by geographic proximity to the AFAP provinces and relevance to the project's double focus on fisheries co-management and aquaculture potential, AFAP 2 geographical targeting will include two more interior provinces to make a total of five provinces (Uige, Bie, Bengo, Kwanza Norte and Malanje).
110. AFAP 2 design will leverage AFAP lessons to define an elaborate criterion that will guide selection of municipalities and specific communities to be determined by several factors including: a) presence of inland fisheries ecosystem (lagoons, rivers, dams) b) availability of suitable locations for establishment of fish ponds c) poverty index d) vulnerability to food and nutrition insecurity e) fisheries and aquaculture productivity/production potential f) climate vulnerability, and g) potential for enterprise development.
111. The programme will directly target 31,000 vulnerable, poor and disadvantaged rural households engaged in or willing to participate in artisanal fisheries and aquaculture, and rural micro enterprises along the fisheries value chain with potential to contribute to food and nutrition security of targeted communities. These will include; food-insecure artisanal fishers, women and youth, women headed households and other disadvantaged groups such as people living with disabilities, ex-combatants, those affected by climate change and people living with HIV & AIDs.
112. An inclusive approach will be explored to enable the very poor, food insecure, vulnerable groups to participate and benefit from programme interventions while considering such criteria as: a) artisanal fishers who already meet their minimal needs, but remain vulnerable to shocks that hinder their capacity for surplus production especially women and the youth b) small and medium scale enterprises to support value addition and market linkages c) poor and vulnerable rural households who have little or no capacity to generate incomes and access to productive assets d) specification of quotas for participation of women (40%), Youths (30%) Disabled and other vulnerable groups(5%). The specific characteristics of project target groups have been elaborated in Key File-table 4.

3. Institutional analysis

113. Nutrition and Gender Institutional and policy analysis

114. Ministry of Health: Has the following policies on Nutrition

1. *The National Food and Nutrition Policy (2010- 2025)*
2. *National Strategy on Food and Nutrition Security (2010-2025)* aims to ensure that all Angolans have, at all times, availability of food of adequate quality and variety and the socioeconomic means to purchase it, to enable them to contribute to the human, economic and social development of Angola (LSE/Graham Institute of Climate Change and the Environment, 2023).
3. *The National Sanitary Development Plan 2012 – 2025* focuses on the “prevention and treatment of nutrition disorders” with, among others, the following six targets: i. Reduce prevalence of under-five stunting to less than 5%, until 2021 ii. Increase proportion of exclusive breastfeeding in the first 6 months to 85%, until 2021 iii. Increase coverage of vitamin A supplementation in children aged 6 – 59 months to 95%, until 2021 iv. Reduce prevalence of under-five underweight to less than 10%, until 2021 v. Increase coverage of household consumption of iodized salt to 90%, until 2021 vi. Increase coverage of antenatal iron and folic acid supplementation to 95%, until 2025.
4. *The National Development Plan (PDN) 2018 – 2022* which encompasses a program on “improving maternal and child health and nutrition”.
5. *The National Nutrition Strategy for Early Childhood*

115. **Nutrition: Governance:** The nutrition sector in Angola is fragmented, with relevant functions integrated in different ministries as described below:

116. *The National Nutrition Program (Programa Nacional de Nutrição)* is one of the programs within the Department of Primary Healthcare of the National Public Health Directorate. Therefore, it is under the tutelage of MINSA. It is the entity largely focused on the policies regarding nutrition-specific interventions.
117. *The National Department for Food Safety* is inserted within the *Ministry of Agriculture and Forestry (MINAGRIF)*. Its role is mainly on the regulation and monitoring of food security and quality systems within Angola. MINAGRIF is currently responsible for the development of the National Food Quality System and the Information and Alarm System for Food and Nutritional Security (Sistema de Informação e Alerta Rápido para a Segurança Alimentar e Nutricional).
118. *The Ministry of Social Care, Family and Women's Promotion (MASFAMU; Ministério da Acção Social, Família e Promoção da Mulher)* is largely responsible for leading social care initiatives and providing social aid to the most impoverished; providing food assistance to families, thus preventing undernutrition in children.
119. *National Multisectoral Platform for Nutrition (Plataforma MultiSectorial Angolana para a Nutrição)*, launched in 2018, which sought to offer a space for intersectoral coordination on the nutrition sector. This platform seems to be inactive, and its initiatives are not well understood.
120. **Ministry of Social Affairs, Family and promotion of women Development policies include:** The Ministry of Social Affairs, Family and Promotion of Women Development (MSAFPWD) is responsible for implementation of gender policy and the strategy for the development of rural women.

121. Presidential Decree No. 222/13 on the National Policy for Gender Equality and Equity.

122. **The Ministry of Welfare and Social Reintegration:** Angola acceded to the Convention on the Rights of Persons with Disabilities on January 11, 2013. The country recognizes the importance of social inclusion of people with disabilities.

123. **The Ministry of Youth and Sports** is responsible for the implementation of the national youth plan, as well as advocating and coordinating with other government ministries on behalf of youth. According to the 2006 USAID report, the Ministry is also responsible for youth centres throughout the country, providing services such as entrepreneurship training, library services and recreation. USAID has a direct partnership with the Ministry of Youth and Sports, supporting the implementation of the national youth plan with its own programming in the country.

124. **Climate and Environment**

125. **Ministry of Environment** is responsible for formulating and implementing policies related to environmental conservation, climate change, and natural resource management. It includes the National Directorate for the Environment, which is involved in environmental protection, environmental impact assessments, and environmental policy implementation. The National Directorate for Climate Change, which is also part of the Ministry is responsible for coordinating climate change-related activities, policies, and actions in Angola.

126. **National Institute of Meteorology and Geophysics (INAMET)** is tasked with monitoring and forecasting weather, climate, and environmental conditions in Angola. They play a crucial role in providing climate data and information for the country.

127. **National Institute of Biodiversity and Conservation Areas (INBAC)** is responsible for biodiversity conservation and the management of protected areas in Angola. They work to protect natural habitats, flora, and fauna.

128. **National Institute of Fisheries Research (INIP)** focuses on research and development in the fisheries sector, including the sustainable management of fishery resources and aquaculture.

129. **Angolan Agency for Investment Promotion and Export (APIEX)**, while not specifically focused on climate and environment, this agency can play a role in promoting sustainable investments, including in the fisheries sector.

4. Environmental and social category

130. The environment and social category of the project is moderate. This is categorisation recognises the likelihood of some potential adverse hazards and repercussions on human populations or the environment. However, the project does not entail activities that have a significant potential for harming people or the environment and will not be located in ecologically or socially sensitive areas. The main environmental and social risks identified for the fisheries and aquaculture development activities include: (i) contamination of water bodies as ponds are being drained or cage culture is introduced in lagoons; (ii) land degradation as a result of land use change and the removal of vegetation to construct ponds and markets and rehabilitate roads; (iii) increased waste volumes at fish landing points and markets; (iv) and conflicts over water use between fish farmers and nearby communities.

131. These risks will be avoided or minimised through measures such as: a) improved water recirculation systems and use of vegetable crops to filter water before discharging it into natural water bodies; b) promoting the use of good quality local raw materials for the manufacture of fish feed; c) erosion control measures around ponds and lagoons (vegetated dykes and bunds etc.) as well as rural roads; (d) improved waste management by promoting use of fish waste use as well as a local circular economy and (e) educating fish farmers on the importance of appropriate feeding, cage netting quality management and strict adherence to maximum cage densities per unit and monitoring of these activities.

132. At the time of design the specific location of the ponds that will be constructed and the roads that will be rehabilitated or constructed is not known, site specific environmental and social management plans cannot be elaborated at design. Therefore, an environment and social management framework (ESMF) including a generic environment and social management plan has been elaborated during the design. The ESMF will guide the management of environmental and social risks during implementation of the AFAP 2 and complement the criteria outlined for the siting of the aquaculture and fisheries infrastructure including the hatcheries, ponds, processing facilities and roads.

5. Climate risk category

133. In cognisance of most AFAP2 activities focusing on inland fisheries and aquaculture the climate change classification is moderate. This classification recognises that climatic events such as floods and droughts will have potential adverse impacts on productivity of AFAP2 ponds and functionality of markets and roads if not well sited and constructed. Climatic events could also adversely impact the water availability for the aquaculture activities. Climate change is predicted to impose a considerable burden on national development and livelihoods since the productive basis of the rural economy is dependent on climate-sensitive activities such as agriculture and fisheries, which play an important role in local livelihoods and the national economy. Climate change related risks for fisheries and aquaculture development include sea level rise, decreased precipitation with increasing variability and increased water temperatures. Temperature rise in the aquatic environment is anticipated to have an influence on marine and riverine ecosystems, as well as dependent fisheries sector. These negative consequences of reduced oxygen availability due to increasing water temperature can result in a reduction in total catch potential per stock and biomass per individual species. Furthermore, for the coastal areas, climate change may impact trade winds, which are at the heart of the so-called upwelling phenomena, in which deep cold waters move vertically and push away warmer surface waters. These cooler waters are rich in nutrients, which serve as the foundation of a complex food web, ultimately determining the abundance of small pelagic fish species.

134. Given the potential adverse impacts of climate change on achieving the AFAP2 objectives, specific measures need to be articulated to increase resilience to the effects of climate change and reap long-term advantages of adaptation best practises. These measures are articulated in the climate risk management plan that provides options to enhance the climate resilience of the communities and their livelihoods. The ESCMF includes water availability as a criteria for selection of geographic areas of intervention and siting of the ponds, ensuring resource use efficiency including fish feed, climate resilient infrastructure development options and capacity building of the target beneficiaries in climate change risk management. The AFAP2 activities are not expected to result in increased vulnerability to climate change but on the contrary, they will improve the climate resilience of the communities and their livelihoods.

6. Recommendations for project design and implementation

135. To improve environment and natural resources management, under Component 1, the focus area will be improved sustainable management of natural assets. The development of lagoon community/participatory management plans and their effective implementation will ensure more sustainable management of the fisheries resources and their habitats. Capacity building of the communities to develop and implement the plans will be key to ensuring sustainability of the lagoons and fisheries-dependant livelihoods. A key intervention for sustainable fisheries is the exchange of inappropriate fishing gears with sustainable gears. Water availability, including quantity and quality, will inform the selection of sites for the fishponds and the water from the ponds can be utilised for watering vegetable gardens in close vicinity. Integrated livestock and aquaculture systems will provide benefits of organic fertilisation of the ponds. Ensuring vegetation around the ponds and lagoons will contribute to stabilising the banks and limiting the erosion. The capacity building and environmental management activities will be incorporated into Lagoon management plans as well as the Aquaculture Field Schools manuals and curricula. Under Component 2, waste management and resource use efficiency will be the main areas of focus. This will be achieved through effective waste management at the smart kiosks and markets with fish waste being collected and recycled, aligning with the concept of a circular economy. In addition, renewable energy sources for drying and smoking of the fish will also reduce the pressure on natural resources, such as fuel wood.
136. The project will promote two primary production models, pond aquaculture and cage-culture, by utilising locally adapted technology that allow fish farming to be implemented without severely affecting the local ecosystem. It is important to note that clustering of the ponds (25 in each site) where the water body is shared between producers/other users will require extra biosecurity precautions because the entire area may be quickly affected by potential issues such as disease and over-stocking, which may lead to the collapse of the entire lake ecosystem. Before beginning activities, a baseline analysis will be done to determine suitable areas for cages, including potential cumulative impacts in the region of intervention. The presence of the cultivated species inside the lagoons, as well as adequate depth to support environmentally friendly activities, will be assessed as part of the site selection criteria.
137. These measures included in AFAP2 are inline with IFAD's Environment and Natural Resource Management (ENRM) Policy (2011), which states interventions in the aquaculture sector should seek to:
1. Strengthen fisheries management and tenure rights of fishing communities to common pool resources;
 2. Introduce ecosystem approaches for aquaculture;
 3. Promote integrated coastal and marine resource management to ensure sustainable fishing practice;
 4. Invest in retraining and education for fishers to create alternative employment opportunities;
 5. Invest in properly organized long-term fisheries licensing, aquaculture monitoring and data collection programmes;
 6. Encourage sustainable forms of aquaculture.
138. In an effort to build the climate change resilience of target communities and their livelihoods, climate change vulnerability mapping will be done to inform the siting of infrastructure and climate change adaptation measures and the AFAP-2 investments. Under Component 1, informed siting, raised ponds, boundary nets and vegetated dykes constructed around the ponds will minimise the impacts of floods. Water harvesting and pond liners, as well as the inclusion of small end-line water canals, can also contribute to addressing droughts. The livelihoods diversification through the aquaculture activities contributes to climate change resilience of the target communities. For Component 2 the main climate change adaptation measures will be through the improved design and construction of the market related infrastructure such as inclusion of drainage and water control structures on rural roads in areas that are prone to floods. Use of trees in the landscape for aquaculture and fisheries production will help regulate the micro-climate and minimise the potential effects such as erosion when infrastructure is constructed.
139. Opportunities will be explored to access environment and climate financing through the Adaptation Fund. Discussions have been held with the National Designated Authority for the Adaptation Fund resulting in the agreement to develop a concept note to be submitted for consideration in Q4 of 2024.
140. Stakeholder consultations and dialogue particularly with communities will guide on-site implementation as defined in the ESCMF, with relevant institutions for sustainable NRM (especially water and land) playing an important role during the site selection and implementation phases. This will also make it easier to formalise well-defined land and water user rights when needed.
141. The project will also ensure clear water access and land use rights. As a result, preparations will be implemented to boost the position of individuals/groups who will access and use such resources for fish pond cluster models. The aim will be to ensure that the direct beneficiaries of the project activities retain ownership of the pond infrastructure/s for a term no shorter than that of the major operator/s in the clusters of ponds.

7. Further studies needed

142. Building on the ESCMF developed during design, site specific Environment and Social management Plans (ESMPs) will be required for the clusters of ponds that will be constructed and for the infrastructure such as roads and markets that will be rehabilitated and constructed. The screening process will be based on the following factors: (i) project size and scale (large-scale or industrial aquaculture projects of at least 50 hectares on one site); (ii) proximity of project area to ecologically sensitive areas (close to a coral reef, mangrove swamp, or wetlands); and (iii) production technology and water use (e.g. significant use of ground water, river diversion).

143. The generic ECSMP matrix attached includes monitoring parameters, frequency of monitoring, and responsibility for monitoring, timelines and costs. This will inform the development of the site-specific plans to be developed during implementation.

8. Monitoring and evaluation

144. The project will use M&E indicators in the logical framework to measure climate resilience, improvements in natural resources management (NRM) and nutrition. All people-centred indicators will be disaggregated by sex and age, including people living with disability, where possible. A monitoring plan will be developed to identify monitoring indicators at different levels, parameters to monitor, frequency of monitoring, responsibility for monitoring and cost. Key responsibilities and monitoring for designing and implementing environmental and social safeguards measures are identified within the ESCMP matrix. Procurement actions and budget related to SECAP will be monitored by PMU and IFAD.

9. References

145. Included in the footnotes section

ESCMP Matrix

ESCMP Matrix						
Environmental/Social and climate risks	Recommended Mitigation/Enhancement measures	Public Consultation Activities	Responsible Institution In Implementation Phase	Means of Verification (Monitoring and reporting)	Frequency of Verification	Cost Estimate (USD)
Environment						

<p>Poor pond location/siting (including adequate soil, water quality & quantity all year round)</p>	<p>a) Comply with the criteria set out within the ESCMF thus excluding fragile ecosystems, protected areas (i.e. conservation areas, reserves, parks and their buffer zones) and ensuring adequate environmental conditions</p> <p>b) Ensure water availability and quality all-year-round. Preferably ponds location will exclude areas where water from natural bodies cannot flow-in through gravity for pond culture</p> <p>c) Baseline study to identify suitable areas for cage culture (i.e. depth and oxygenation)</p>	<p>Training of farmers on water management and siting of ponds</p>	<p>PMU, Communities, MINAMB, MINEA, IPA</p>	<p>Report on siting criteria/ESIA</p>	<p>Biannually</p>	<p>25,000</p>
<p>Water quality deterioration of inlet effluent/water bodies during implementation</p>	<p>a) Regular monitoring of water quality by ARAs and/or water management authorities</p> <p>b) Effective risk communication/ early warning system in place</p>	<p>Training of farmers on water pollution management</p>	<p>PMU, Communities, MINAMB</p>	<p>Reports on water analysis</p>	<p>Quarterly</p>	<p>25,000</p>

<p>Pollution or eutrophication of water bodies through effluent discharge including increase in harmful algal blooms (HABs)</p>	<p>a) Integrated farming approach b) Regular monitoring of water quality by both farmers and ARAs/ water management authorities including good risk communication/ early warning system in place c) Adoption of a protocol for remedial actions d) Avoid use of agrochemicals and antibiotics e) Efficient feeding regimes and high feed quality f) Farmers' trainings on water monitoring, good risk communication and awareness creation</p>	<p>Training of farmers on water pollution management , awareness</p>	<p>PMU, Communities, MINAMB</p>	<p>Reports on water quality analysis</p>	<p>Quarterly</p>	<p>25,000</p>
<p>Introduction of exotic species</p>	<p>Avoid introduction of any exotic species.</p>	<p>Training and awareness arising</p>	<p>PMU, Communities, MINAMB</p>	<p>Monitoring reports</p>	<p>Annually</p>	<p>10,000</p>
<p>Risk of predators such as frogs, lizards, birds, crocodiles etc.</p>	<p>Good management practices to include adequate protection measures (i.e. fencing, clear bushes, netting against birds)</p>	<p>Training and awareness of BMPs</p>	<p>PMU, Communities, MINAMB</p>	<p>Biannual</p>	<p>Quarterly</p>	<p>Included in project implementation costs</p>

<p>Degradation of lake/large reservoirs water quality and environment due to unregulated</p>	<p>a) Development of cage culture best practices and environmental management guidelines including regulations (i.e. minimum distance between cages)</p> <p>b) Undertake studies and assessment on the viability of cage culture before implementation</p> <p>c) Ensure adoption of environmental monitoring /reporting plan and waste management plan.</p> <p>d) Ensure adoption of biosecurity procedures for fingerlings introduction, and carrying capacity guidelines to avoid overstocking</p>	<p>Training on water management</p>	<p>PMU, Communities, MINEA, IPA</p>	<p>Reporting plan and waste management plan.</p>	<p>Quarterly</p>	<p>25,000</p>
<p>Post-harvest loss and poor waste management contributing to environmental pollution / GHG emissions</p>	<p>a) Minimise waste by improving harvest and post-harvest technology, including improved fish storage, handling and Adoption of good food processing equipment</p> <p>b) Reuse fish waste (i.e. as manure for crops, for fish feed, as collagen etc.)</p>	<p>Awareness of good environmental management</p>	<p>PMU, Communities, MINAMB</p>	<p>Reports on waste management</p>	<p>Quarterly</p>	<p>25,000</p>
<p>Lack of weather information and disaster risk preparedness</p>	<p>a) Coordinate with INAMET to improve climate information services through extension service training and rehabilitation of met stations.</p> <p>b) Coordinate with Disaster Management Unit to create/ capacitate Local Committees for Disaster Risk Management as part of the National Early Warning Systems.</p>	<p>Awareness on disaster risks</p>	<p>PMU, Communities, INAMET</p>	<p>Climate information provided</p>	<p>Biannually</p>	<p>Included in project Implementation costs</p>
<p>Social risks</p>						

Investment loss	Weather/climate index-based insurance products tailored for small scale fish farmers can be accessed to cover against losses due to natural calamities (i.e. dyke breaking, floods etc.).	Stakeholder engagement through meetings and field visits	PMU + Relevant insurance service providers + INAMET	Training records Number of fish farmers using insurance products	Quarterly	Included in project Implementation costs
Exclusive reliance on aquaculture activities	Diversification of livelihoods and income sources including nutrition aspects	SBCC Campaigns, Stakeholder Engagement s and Integrated Aquaculture Field schools	PMU + IPA + Relevant GOA ministries, Municipal Authorities	Number of meetings/trainings/campaigns Number of enrolled beneficiaries in AFS, gender and age aggregated	Quarterly	Included in project Implementation costs
Disease outbreaks due to contaminants/pollutants release into common water bodies	a) Use of organic fertilizers. Avoid use of agrochemicals or antibiotics b) Integrated farming approach ^[1] c)Adoption of a protocol for remedial actions d)Adherence to Best Management Practices and continuous monitoring of water quality in place	Stakeholder Engagement s and Integrated Aquaculture Field schools Meetings Field visits	PMU + MINEA+ + Municipal authorities+ Ministry of Health	Training records Adoption and adherence rates / compliance records Water quality monitoring reports Meeting reports	Quarterly	Included in project implementation costs
Outbreak of malaria and other water borne diseases	a) Encourage clearance of bushes around ponds and use of mosquito nets or repellents b) Involve public health and create awareness	Stakeholder engagement s through meetings and field visits	PMU + Ministry of Health + other line ministries + provincial/Municipal authorities	Meeting reports Activity records Field visit reports	Quarterly	Included in project implementation costs
Expensive, unreliable/unavailable electricity for aquaculture activities	Opt for gravity solutions to fill the ponds. When not possible promote the use of green technologies (i.e. solar pumps, solar dryer etc.)	Stakeholder engagement s through meetings and field visits	PMU + IPA +Other line ministries	Number/types of technologies promoted Meeting reports Number/types of technologies adopted	Annually	Included in project implementation costs

Accidental falling and drowning in ponds (for example, by children)	a) Fencing off ponds and putting up warning signs b) Public awareness	Stakeholder/ community engagement s through meetings and field visits	PMU Local leaders Project champions Model farmers	Activity records Meeting records Training records	Quarterly	Insurance costs
Risks associated with construction works	ESCMP to specify the ES management requirements that will be the responsibility of contractors and primary suppliers hired (including health and safety).	Stakeholder/ community engagement s through meetings and field visits	Project Coordination, Province, Municipal, Authorities, Service Provider	Community plans ESCMP with specifications Cases reported	Quarterly	Insurance costs
Outbreak of food borne diseases due to poor food safety standards	a) Adoption and adherence to food safety standards b) Adoption of good food processing equipment handling and preparation practices at farm level including labelling c) Promotion of technologies for preservation (i.e. solar dryers) d) Train farmers on good food safety standards and handling.	Stakeholder/ community engagement s through meetings and field visits	PMU Ministry of health Other line ministries Relevant departments e.g. public health Province/Municipal Authorities	Area health records Household case reports Training/awareness reports Meeting records Food safety records in place Compliance records	Quarterly	Health costs
Poor access to higher value markets and lower revenues due to low quality standards	Adopt good quality standards and promote technologies to preserve quality	Stakeholder/ community engagement s through meetings and field visits	Project Coordination, Province, Municipal, Authorities, Relevant line ministries and private sector actors	Quality training records Number of technologies promoted Quality control reports Meeting reports Market access reports	Quarterly	Included in project implementation costs

Health impacts related to air, water, noise emissions and waste	Inclusion of all health mitigation measures in the ToRs and the contracts of services providers contractors and consultants	Stakeholder engagement through meetings and field visits	PCU Province, Municipal, Authorities, Relevant line ministries and private sector actors	ToRs Site inspection reports Compliance reports	Quarterly	Included in project implementation costs
Vulnerable groups particularly women, excluded from decision making	Apply participatory methods to planning, implementation of various interventions that include vulnerable groups. Support their engagement in relevant decision making	Stakeholder engagement through meetings and field visits	PMU + local extension workers + service provider	Number of reported incidences	Annually	Included in project implementation costs
Climate						
Water stress and droughts	Ensure siting of ponds are in areas with sufficient water availability	Historic trends and incidences of droughts including impacts	PMU/IPA Provincial and Municipality Officers	Project reports	Annually	25,000
Intense rainfall resulting in floods	Raised ponds, vegetated dykes, ensure siting of ponds is not in flood prone areas	Historic trends and incidences of floods including impacts	PMU/IPA Provincial and Municipality Officers	Project reports	Annually	25,000

Footnotes

146. ^[1] Ensure avoidance of excessive levels of potentially hazardous elements (i.e. nitrogen).

^[1] National Institute of Statistics (INE).

^[2] Angola-United Nations Population Fund (UNFPA), 2023, World Population Prospects 2022 revision. United Nations Population Division, 2022

^[3] Angola-World Food Programme (WFP), 2019, Interim Strategic Country Plan – Angola (2020-2022)

^[4] The teenagers involved are between 15 and 19 years old.

<http://documents.worldbank.org/curated/en/337691552357946557/pdf/angola-scd-03072019-636877656084587895.pdf>

^[5] Demographic projection from the National Institute of Statistics (INE, 2022), <https://www.ine.gov.ao/>. According to the results of the 2014 population census, this population is 4.72 million inhabitants in the project area, which is 18% of the 25.8 million inhabitants of the country (INE, 2014).

^[6] World Bank, 2023, World Perspective,

^[7] Youth (aged 15 to 35 years) and women represent 35 per cent and 51 per cent respectively.

[\(https://www.citypopulation.de/en/angola/admin/11_bi%C3%A9/\)](https://www.citypopulation.de/en/angola/admin/11_bi%C3%A9/)

^[8] including about 17 million women (51% of the general population) and 11.6 million young people aged 15-34; i.e. 32.7% of the total population. (United Nations, Department of Economic and Social Affairs, Population Division; World Population Prospects: The 2022 Revision)

^[9] The population of Uige, Bie, Bengo, Cuanza Norte and Malanje provinces is estimated at 1,483,118; 1,455,255; 356,641; 443,386 and 986,363 respectively totalling to 4,724,763 people with 58 percent rural population and 42 percent urban population (INE, 2014)

General Census);

[10] World Bank (2021)

[11] World Bank, "Angola », 2021. Available at:

<https://documents1.worldbank.org/curated/en/099926110132214008/pdf/IDU0433ca40c00d02045920b77e0fbc5442788c1.pdf>.

[12] The Angola 2019 score on HDI was 0.581, for a ranking of 148 out of 189 countries (<https://hdr.undp.org/sites/default/files/Country-Profiles/AGO.pdf>)

[13] Ibid

[14] Angola Multi-dimensional Poverty Index, 2020

[15] Ibid

[16] This index is one of the highest in Africa (<https://openknowledge.worldbank.org/bitstream/handle/10986/34057/Angola-Poverty-Assessment.pdf?sequence=4>)

[17] World Bank « GINI Index – Angola », 2018.

[18] United Nations Development Programme (UNDP), 2022. *Rapport sur le développement humain, 2021/2022*.

[19] World Bank, 2000; Angola Poverty Assessment

[20] 1.58 million households in Angola require food assistance in 2022 due to the 2021/22 drought in the South of Angola

[21] Angola Multi-dimensional Poverty Index, 2020

[22] Small-scale farms produce rainfed food crops on plots with an average size of 2 to 3 hectares. Small household plots do not exceed 0.2 hectares in irrigated areas (AfDB, 2022)

[23] IFAD, Angola 2023.

[24] Executive Board of the United Nations Development Programme, the United Nations Population Fund and the United Nations Office for Project Services, 2023, *Draft country programme document for Angola (2024-2028)*, p2.

[25] World Bank, « Angola », *Poverty & Equity Brief, Africa Eastern & Southern*, avril 2023.

Available at:https://databankfiles.worldbank.org/public/ddpext_download/poverty/987B9C90-CB9F-4D93-AE8C-50588BF00QA/current/Global_POVEQ_AGO.pdf.

[26] UNICEF, *Childhood in Angola: A multidimensional Analysis of Child Poverty*, 2018. Disponible à l'adresse suivante : www.unicef.org/esa/reports/childhood-angola.

[27] Harnessing fishery resources for socioeconomic development: Lessons from Angola, UNCTAD, 2022

[28] United Nations Conference on Trade and Development (UNCTAD) 2023, *Angola expands fishing net to increase fish exports* (<https://unctad.org>)

[29] ATLAFCO, 2014, op.cit., p45

[30] ATLAFCO, 2014, op.cit., p45

[31] ATLAFCO, 2014, op.cit., p45

[32] Angola Country programming framework, FAO, 2013-2017.

[33] Harnessing fishery resources for socioeconomic development: Lessons from Angola, UNCTAD, 2022

[34] Ibid

[35] Angola Country programming framework, FAO, 2013-2017.

[36] Harnessing fishery resources for socioeconomic development: Lessons from Angola, UNCTAD, 2022

[37] Ibid

[38] Cooperatives in Angola are regulated through Law No. 23/15 of 31 August 2015 (Lei das cooperativas), which is applicable to all cooperatives operating in the country, irrespective of their socioeconomic objective (Article 2), and defines cooperatives as independent legal persons with

varying capital and composition, functioning on the principle of democratic control.

[39] Du Preez ML (2009). Fishing for sustainable livelihoods in Angola: The co-operative approach. SAIIA Occasional Paper No. 45. South African Institute for International Affairs. Available at https://media.africaportal.org/documents/SAIIA_Occasional_Paper_45.pdf.

[40] Ibid

[41] Angola Livelihood Zones and Descriptions, FAO 2013.

[42] World Economic Forum, 2022; Gender Gap report

[43] Women make up 51.2% of Angola's estimated population of 33 million in 2022 (National Institute of Statistics, 2023).

[44] Employed and unemployed persons aged 15 and over.

[45] Gender Links and Southern African Development Community (SADC). SADC Gender Protocol Alliance. 2019. Sexual and Reproductive Health and Rights (SRHR) Mapping Report 2019. http://genderlinks.org.za/wp-content/uploads/2019/03/English_Mapping-of-SRHR-Policies-and-Lawsby-Country-in-SADC_03072019.pdf.

[46] In 2022, the overall unemployment rate was 29.6% (Angola-National Institute of Statistics-INE, 2023, Statistics 2022)

[47] National Institute of Statistics INE, 2023

[48] World Economic Forum, 2022; Gender Gap report

[49] Angola, Ministry of Education, "Statistical Yearbook of Education 2019", Angola, 2021. The source of the data is aligned with the National Development Plan.

[50] Angola, Ministry of Education, « Statistical Yearbook of Education 2019 », op.cit.

[51] In 2022, the literacy rate for young men (15-24 years) is 86 per cent compared to 81 per cent for young women (15-24 years)

[52] World Bank, 2023

[53] Institute for Security Studies; Jenny Clover (2005) and Food and Agriculture Organization of the United Nations (FAO) (2014).

[54] African Development Bank (AfDB), Angola, 2022,

[55] INE-Angola, Multiple Indicator and Health Survey (MIS) 2015-2016.

[56] Banque mondiale. 2018. Angola: Systematic Country Diagnostic: Creating Assets for the Poor.

<http://documents.worldbank.org/curated/en/337691552357946557/pdf/angola-scd-03072019-636877656084587895.pdf>.

[57] National Institute of Statistics (INE), 2016 and Demographic and Health Surveys Programme 2015/2016.

[58] World Bank (2022) RECLIMA - project Information Document

[59] Small-scale fishing rights, as well as fishing rights in international rivers or in internal waters under Angolan jurisdiction, are granted only to Angolan nationals

[60] Gender Equity and Public Policy – Angola is with women and women Men, 2021, Mosaiko / Instituto para a Cidadania (Institute for Citizenship) and FEC /Fundação Fé e Cooperação (Faith and Cooperation Foundation), p121. (Available online at www.mosaiko.op.org)

[61] Rural trade is virtually non-existent (except in the major centres) and marketing of agricultural surplus is low due to, among other things, high transport costs. In addition, agriculture is limited to a few resistant and safe crops, such as cassava, thus worsening the nutritional situation in rural families (AfDB, 2008).

[62] African Development Bank (AfDB), 2008, *Angola, Country Gender Profile*, p18.

[63] The central government has accelerated the implementation of the Integrated Municipal Intervention Plan (PIIM), dedicated to upgrading local public assets (USD 1.5 billion withdrawn from the sovereign wealth fund). The Cash Transfer Program, which focuses on lump-sum income transfers to vulnerable households. The Export Diversification and Import Substitution Programme (PRODESI) provided assistance to hard-hit exporting firms.

[64] Harnessing fishery resources for socioeconomic development: Lessons from Angola, UNCTAD, 2022

[65] AfDB (2013). The Republic of Angola: Fisheries Sector Support Project 2014–2019. African Development Bank. Available at https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Angola_-_Fisheries_Sector_Support_Project_-_Appraisal_Report.pdf

[66] FAO (2020b). The fisheries and aquaculture country profile for Angola. Food and Agriculture Organization of the United Nations.

Rome. Available at <http://www.fao.org/fishery/facp/AGO/en>.

[67] The Ministerial Conference on Fisheries Cooperation among African States Bordering the Atlantic Ocean (ATLAFCO), 2014, "Industrie des pêches et de l'aquaculture", p24

[68] African Development Bank (AfDB), Angola, 2008, Angola Gender Profile.

[69] The fishing industry is also an important sector for employment. Approximately 41,000 people are directly employed in the sector and another 85,000 are involved in fishing-related activities. Approximately 1,700 women are employed in the fishing industry (ATLAFCO, 2014, op.cit., p45).

[70] World Food Programme (WFP), 2019, Interim Country Strategic Plan — Angola (2020-2022), (WFP/EB.2/2019/7-B/1 p4)

[71] Empowerment: Build confidence, self-esteem and strengthen the aspirations of men and women, as well as the knowledge, skills and capacities that individuals need to thrive; changing relationships: Transforming existing power relations between men and women in the context of private relationships and social networks, and in terms of group membership or activism, citizenship and market negotiations; (iii) Transforming structures: Supporting the transformation of discriminatory social norms, customs, values and practices (in the informal setting), as well as laws, policies, procedures and services (in the formal setting).

[72] Angola does not have an age definition; however, Angola is a signatory to the African Charter which defined youth as 15 to 35 years of age.

[73] https://www.citypopulation.de/en/angola/admin/11__bi%C3%A9/AND_INES, 2014

[74] The unemployment rate at the national level was 31.6% in the second quarter of 2021 (AfDB-Angola, 2022, op.cit. pv). The unemployment rate at the national level was 31.6% in the second quarter of 2021 (AfDB-Angola, 2022, op.cit. pv)

[75] Tradingeconomics.Com | Instituto Nacional De Estatística, Angola, 2022.

[76] Women account for 87.9 per cent of informal employment compared to 72.3 per cent of men (National Institute of Statistics INE, 2023)

[77] World Directory of Minorities and Indigenous People

[78] World Bank 2021, ADSWA proposal

[79] INE 2014; General Census

[80] Convention on the Right of Persons with Disabilities (2017) Angola

[81] <https://www.globalhungerindex.org/angola.html>

[82] IFAD-Republic of Angola, Country Strategic Opportunities Programme 2019-2024, p28

[83] INE, Multiple Indicator and Health Survey (MISI) 2015-2016

[84] Global Nutrition Report, 2022

[85] Southern African Development Community (SADC), 2022, *Synthesis Report 2022 on the State of Food and Nutrition Security and Vulnerability in Southern Africa*, p. 28.

[86] Deutsche Welthungerhilfe e.V. & Concern Worldwide, 2023, *Global Hunger Index Summary, the power of Youth in transforming food systems*

[87] Angolan Demographic and Health Survey, 2015/2016

[88] <https://data.worldbank.org/indicator/SH.STA.WAST.ZS?locations=AO>

[89] <https://data.worldbank.org/indicator/SH.STA.OWGH.ZS?locations=AO>

[90] Global Nutrition Report (2021), Angola

[91] Ibid

[92] Angolan Demographic Health Survey, 2015/2016

[93] World Bank (2011) Angola Nutrition Gap Analysis

[94] Ibid

[95] [https://reliefweb.int/report/angola/angola-food-insecurity-emergency-appeal-no-mdrao007#:~:text=Food%20insecurity%20analysis%20conducted%20in,IPC%20Phase%204%20\(Emergency\)](https://reliefweb.int/report/angola/angola-food-insecurity-emergency-appeal-no-mdrao007#:~:text=Food%20insecurity%20analysis%20conducted%20in,IPC%20Phase%204%20(Emergency)).

[96] <https://www.unicef.org/angola/agua-saneamento-e-higiene>

[97] <https://data.worldbank.org/indicator/SH.DYN.AIDS.ZS?locations=AO>

- [98] <https://data.worldbank.org/indicator/SH.STA.DIAB.ZS?locations=AO>
- [99] <https://globalnutritionreport.org/resources/nutrition-profiles/africa/middle-africa/angola/>
- [100] Minimum Dietary Diversity for Women – Guide for measurement <http://www.fao.org/3/a-i5486e.pdf>; Compendium of Indicators for Nutrition-Sensitive Agriculture, FAO <http://www.fao.org/3/i6275fr/l6275FR.pdf>
- [101] PRO-WEAI <http://weai.ifpri.info/versions/pro-weai/>; Assessing Women's Empowerment in Agricultural Development Projects, RURAL 21 – The International Journal of Rural Development <https://www.rural21.com/francais/actualites/detail/article/evaluer-lautonomisation-des-femmes-dans-les-projets-de-developpement-agricole-00003210/>
- [102] Estrada, R. G., da Silva, M. N. F., & Agostinho, S. C. (2008). Mammals of Angola, Africa. *Bonn Zoological Bulletin*, 56(2), 150-171.
- [103] Beilfuss, R., & dos Santos, R. (2002). The Avifauna of Angola: Its Conservation, History, and Literature. *Ostrich*, 73(3-4), 168-175. doi: 10.1080/00306525.2002.9639889.
- [104] Dowsett, R. J. (2008). The Birds of Angola: An Annotated Checklist. BOU Checklist No. 24. British Ornithologists' Union
- [105] Ministry of Environment of Angola. (2013). National Biodiversity Strategy and Action Plan of Angola. Retrieved from <https://www.cbd.int/doc/world/ao/ao-nbsap-01-en.pdf>.
- [106] World Wide Fund for Nature (WWF). (2021). Conservation in Angola. Retrieved from <https://www.worldwildlife.org/places/angola>.
- [107] Food and Agriculture Organization (FAO). (2020). Global Forest Resources Assessment 2020: Main Report. FAO, Rome, Italy. Retrieved from <http://www.fao.org/3/ca9825en/ca9825en.pdf>.
- [108] Kahindo, J. M., Pélissier, R., Gourlet-Fleury, S., & Morin, X. (2018). Human and Climatic Influences on Forest Fires in the Tropical Dry Forests of the Congo Basin. *Journal of Applied Ecology*, 55(6), 2727-2738. doi: 10.1111/1365-2664.13216
- [109] Shakesby, R. A., & Doerr, S. H. (2006). Wildfires as a Source of Dissolved Organic Carbon to Surface Waters. *Earth and Planetary Science Letters*, 241(1-2), 476-482. doi: 10.1016/j.epsl.2005.11.015
- [110] IPCC. (2014). Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press.
- [111] Ndinangamwe, C. H., Ringen, A. G., & Baudron, F. (2017). Climate Change and Coastal Vulnerability in the Atlantic Region of Southern Africa: Multi-scale Analysis and Implications for Adaptation. *Regional Environmental Change*, 17(3), 797-808. doi: 10.1007/s10113-016-1076-6
- [112] Ribeiro, L. C., Bétio, M. T. N., & Cardoso, S. C. (2020). Assessment of Deforestation and Land Use Changes in Cabinda, Angola, Using Remote Sensing and Geographic
- [113] FAO. (2018). Forest Resources Assessment 2020: Angola Country Report. Food and Agriculture Organization of the United Nations. Retrieved from <http://www.fao.org/3/ca9825en/ca9825en.pdf>
- [114] Ministério do Ambiente de Angola. (2015). National Report on the State of the Environment of Angola 2015. Retrieved from <https://wedocs.unep.org/bitstream/handle/20.500.11822/27592/ao.pdf>
- [115] IPCC. (2014). Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press.
- [116] Barbosa, R., Santos, J., & Silva, T. (2021). Climate Change Impacts on Aquaculture in the Benguela Current Ecosystem: Challenges and Opportunities. *Reviews in Aquaculture*, 13(3), 833-846.
- [117] Bento, C., Mendes, P., & Guedes, I. (2022). Vulnerability Assessment of Angolan Aquaculture to Climate Change. *Aquaculture Economics & Management*, 26(1), 87-101.
- [118] Food and Agriculture Organization (FAO). (2020). Climate Change Implications for Fisheries and Aquaculture: A Global Analysis. FAO Fisheries and Aquaculture Technical Paper No. 627. Rome, Italy. Retrieved from <http://www.fao.org/3/ca9229en/CA9229EN.pdf>
- [119] Instituto Marítimo e Portuário de Angola (IMPA). (2018). Relatório Sobre a Situação das Pescas e Aquicultura em Angola. Ministério dos Transportes de Angola. Retrieved from http://www.impa.co.ao/pesca/aquicultura/docs/Relatorio_pesca_e_aquicultura_em_angola.pdf

Environmental and Social Safeguards Classification: Moderate

Environmental and Social Safeguards				
Biodiversity conservation	Yes/No	Likelihood	Consequence	Risk Rating
1.1 Could the project potentially involve or lead to conversion or degradation of biodiversity, habitats (including modified habitat, natural habitat and critical natural habitat) and/or ecosystems and ecosystem services?	Yes	Possible	Moderate Project will significantly affect modified habitat, but will not impinge on natural habitat or critical natural habitat.	Moderate
1.2 Could the project involve or potentially lead to activities involving habitats that are legally protected, officially proposed for protection, or recognized as protected by traditional local communities and/or authoritative sources (e.g. National Park, Nature Conservancy, Indigenous Community Conserved Area, ICCA, etc.)?	No			Low
1.3 Could the project potentially involve or lead to an increase in the chance of human-wildlife encounters/conflict?	No			Low
1.4 Could the project potentially involve or lead to risks to endangered species (e.g. reduction, encroachment on habitat)?	No			Low
1.5 Could the project potentially involve or lead to impacts/risks to migratory wildlife?	No			Low
1.6 Could the project potentially involve or lead to introduction or utilization of any invasive alien species of flora and fauna, whether accidental or intentional?	No			Low
1.7 Could the project involve or lead to the handling or utilization of genetically modified organisms?	No			Low
1.8 Could the project involve or lead to procurement through primary suppliers of natural resource materials?	Yes	Possible	Moderate Project requires procurement of natural resources through primary suppliers, and resource extraction is tightly regulated	Moderate
Resource Efficiency and Pollution Prevention	Yes/No	Likelihood	Consequence	Risk Rating
2.1 Could the project involve or lead to the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Yes	Possible	Minor Pollutants may possibly be released, either routinely or by accident, but treatment systems are proven and verified. Receiving environment has absorptive capacity.	Moderate
2.2 Could the project involve or lead to primary not environmentally sustainable production of living natural resources? (Note: this includes the cultivation or rearing of plants or animals, including annual and perennial crop farming, animal husbandry (including livestock), aquaculture, plantation forestry, etc)	Yes	Unlikely	Moderate Project is fully dependent on production of living natural resources. Project is sited in an existing agricultural area, with low environmental and/or social sensitivity.	Moderate

Environmental and Social Safeguards				
2.3 Could the project involve or lead to engagement in areas of forestry, including the harvesting of natural forests, plantation development, and/or reforestation?	No			Low
2.4 Could the project involve or lead to significant consumption of raw materials, energy, and/or water?	Yes	Possible	Moderate The project will require consumption of raw materials, energy, and/or water. This will be a significant component of the project, but impacts can be appropriately managed.	Moderate
2.5 Could the project involve or lead to significant extraction, diversion or containment of surface or ground water (e.g. construction of dams, reservoirs, river basin developments, groundwater extraction)?	Yes	Unlikely	Moderate The project needs a considerable amount of groundwater or surface water. This will require a minor extension of existing sources. It includes construction of large-scale irrigation schemes rehabilitation/development – below 300 ha per scheme	Moderate
2.6 Could the project involve inputs of fertilizers and other modifying agents?	No			Low
2.7 Could the project involve or lead to procurement, supply and/or result in the use of pesticides on crops, livestock, aquaculture or forestry?	Yes	Unlikely	Minor The project only requires minimal amounts of pesticide.	Low
2.8 Could the project be located in an area which is being, or has been, polluted by an external source (e.g. a mine, smelter, industry)?	No			Low
2.9 Could the project involve livestock – extensive and intensive systems and animal products (dairy, skins, meat, etc.)?	No			Low
Cultural Heritage	Yes/No	Likelihood	Consequence	Risk Rating
3.1 Could the project be located in areas that are considered to have archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values or contains features considered as critical cultural heritage?	No			Low
3.2 Could the project directly or indirectly affect indigenous peoples' rights, lands, natural resources, territories, livelihoods, knowledge, social fabric, traditions, governance systems, and culture or heritage (tangible and intangible)?	No			Low
3.3 Could the project involve or lead to significant excavations, demolitions, movement of earth, flooding or other environmental changes?	Yes	Possible	Moderate Moderate impact on land. Some short-term earth moving and environmental changes required. Rehabilitation is straightforward.	Moderate

Environmental and Social Safeguards				
3.4 Could the project involve or lead to adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No			Low
3.5 Could the project involve or lead to alterations to landscapes and natural features with cultural significance?	No			Low
3.6 Could the project involve or lead to utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	No			Low
indigenous peoples	Yes/No	Likelihood	Consequence	Risk Rating
4.1 Could the project be sited in areas where indigenous peoples are present (including the project area of influence)?	No			Low
4.2 Could the project result in activities located on lands and territories claimed by indigenous peoples?	No			Low
4.3 Could the project result in impacts on the rights of indigenous peoples or to the lands, territories and resources claimed by them?	No			Low
4.4 Could the project result in the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No			Low
4.5 Could the project lead to impacts on the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No			Low
Labour and Working Conditions	Yes/No	Likelihood	Consequence	Risk Rating
5.1 Could the project operate in sectors or value chains that are characterized by working conditions that do not meet national labour laws or international commitments? (Note: this may include discriminatory practices, high gender inequality and the lack of equal opportunities, denial of freedom of association and collective bargaining, labour migrants)	No			Low
5.2 Could the project use or operate in a value chain where there have been reports of forced labour? (Note: Risks of forced labour may be increased for projects located in remote places or where the status of migrant workers is uncertain)	No			Low
5.3 Could the project involve children (a) below the nationally-defined minimum employment age (usually 15 years old) or (b) above the nationally-defined minimum employment age but below the age of 18 in supported activities or in value chains?	No			Low
5.4 Could the project: (a) operate in a sector, area or value chain where producers and other agricultural workers are typically exposed to significant occupational and safety risks, and/or (b) promote or use technologies or practices that pose occupational safety and health (OSH) risks for farmers, other rural workers or rural populations in general? (Note: OSH risks in agriculture might include: dangerous machinery and tools; hazardous chemicals; toxic or allergenic agents; carcinogenic substances or agents; parasitic diseases; transmissible animal diseases; confined spaces; ergonomic hazards; extreme temperatures; and contact with dangerous and poisonous animals, reptiles and insects. Psychosocial hazards might include violence and harassment.)	Yes	Possible	Minor The project operates in a sector, area, or value chain where workers are occasionally exposed to significant OSH risks, and where regulation is known to be effective.	Moderate
Community Health, Safety and Security	Yes/No	Likelihood	Consequence	Risk Rating

Environmental and Social Safeguards				
6.1 Could the project be at risk from water-borne or other vector-borne diseases (e.g. temporary breeding habitats), and/or communicable and non-communicable diseases?	Yes	Possible	Minor The project is situated in an area where negative impacts from water-borne or other vector-borne diseases, or communicable/non-communicable diseases are possible, but where there is no evidence of past impact, and where containment of these impacts would be effective if problems emerged.	Moderate
6.2 Could the project lead to unintended negative impacts on nutrition?	No			Low
6.3 Is there a possibility of harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?	Yes	Unlikely	Minor The project has only moderate reliance on buildings or infrastructure. Risk of failure is unlikely to lead to loss of life or significant environmental damage. The structural integrity of the required infrastructure has been independently verified.	Low
6.4 Could the project involve or lead to the construction or rehabilitation of dams?	No			Low
6.5 Could the project involve or lead to transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No			Low
6.6 Could the project lead to adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	Yes	Unlikely	Minor The project will only have minor impacts on ecosystem services, and these can be mitigated through standard environmental management planning.	Low
6.7 Could the project lead to the potential for gender-based violence, including sexual harassment, exploitation and abuse, as a result of labour influx, land redistribution, or other actions that alter community dynamics?	Yes	Possible	Moderate Moderate changes to community dynamics may result in increased potential for gender-based violence or sexual exploitation. Gender-based violence interventions are integrated into project design.	Moderate

Environmental and Social Safeguards				
6.8 Could the project lead to increases in traffic or alteration in traffic flow?	Yes	Possible	Minor The project will result in minor increases to traffic volume. Only minor increase in risk of injury or death.	Moderate
6.9 Could the project lead to an influx of project workers?	Yes	Possible	Moderate The project is partly dependent on an influx of project workers, but the majority of workers are local. Risks of impacts have been planned for, and protocols are in place	Moderate
6.10 Could the project involve or lead to the engagement of security personnel to protect facilities and property or to support project activities?	No			Low
Physical and economic resettlement	Yes/No	Likelihood	Consequence	Risk Rating
7.1 Could the project result in temporary or permanent and full or partial physical displacement (including people without legally recognizable claims to land)?	No			Low
7.2 Could the project result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	Yes	Unlikely	Moderate Loss of assets or resources is possible, but would be less than 10% of a community assets, or a farmer assets.	Moderate
7.3 Could the project present a risk of forced evictions?	No			Low
7.4 Could the project result in impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	Yes	Possible	Moderate The project will result in moderate changes to land tenure arrangements and/or community-based property rights/customary rights. Legal recourse and other forms of arbitration/conflict resolution are available.	Moderate
Financial intermediaries and direct investments	Yes/No	Likelihood	Consequence	Risk Rating
8.1 Could the investment be granted to an institution that does not have an environmental and social policies and an associated environmental and social management system (ESMS) in place (transparent, publicly available)?	No			Low
8.2 Could the investment be granted to an institution with insufficient capacities (i.e. unqualified personnel e.g. ES Officer) to implement the ESMS?	No			Low
8.3 Could the investment be granted to an institution that does not have an Exclusion List?	No			Low
8.4 According to the institution's portfolio classification: Could the institution have potential high-risk projects in their portfolio?	No			Low

Environmental and Social Safeguards				
8.5 Is there evidence that the institution does not comply with the local legal framework?	No			Low
8.6 Does the institution provide a stable communication channel with stakeholders and local communities (e.g. a Grievance Redress Mechanism)?	No			Low
8.7 Does the organization provide auxiliary or capacity building support services.	No			Low

Climate Risk Classification: Moderate

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

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

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 Project Design Report

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

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department



Republic of Angola

Artisanal Fisheries and Aquaculture Project – Phase 2(AFAP-2)

First Year Annual Work Plan and Budget

**Angola: Artisanal Fisheries and Aquaculture Project – Phase 2 (AFAP-2)
Consolidated Annual Work Plan and Budget 2025**

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CURRENCY EQUIVQLENTS

Currency Unit	=	Angolan Kwanza (AOA)
USD 1.0	=	AOA 800

Weights and Measures

1 kilogram	=	1000 g
1 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres
1 Feddan	=	1 acre

FISCAL YEAR

1 January-31 December

**Angola: Artisanal Fisheries and Aquaculture Project – Phase 2 (AFAP-2)
Consolidated Annual Work Plan and Budget 2025**

Abbreviations and Acronyms

ADECOS	Community Development and Sanitation Agents
ADPP	Angolan non-governmental association (Ajuda De Desenvolvimento De Povo Para Povo)
AFAP	Artisanal Fisheries and Aquaculture Project
AFS	Aquaculture Field School
AWPB	Annual Work Plan and Budget
BSF	Black Soldier Flies
CAS	Catch Assessment Surveys
CCP	Community Council of Fisheries
CPT	Carbonized Pond Technology
ECP	Anti-poverty Strategy
EIA/ESIA	Environmental Impact Assessment/ Environmental and Social Impact Assessment
GoA	Government of Angola
IFAD	International Fund for Agricultural Development
IAA	Integrated Aquaculture-Agriculture
IPA	Institute for the Development of Artisanal Fisheries and Aquaculture
KM	Knowledge Management
LMP	Lagoon Management Plan
M&E	Monitoring and Evaluation
MINAMB	Ministry of the Environment
MINFIN	Ministry of Finance
MINPERMAR	Ministry of Fisheries and Marine Resources
MTR	Mid Term Review
NRM	Natural Resource Management
ORMS	Operational Results Management System
PDR	Project Design Report
PHLs	Post-Harvest Losses
PIM	Project Implementation Manual
PMT	Programme Management Team
PMU	Project Management Unit
PONAN	National Strategic Policies for Nutrition and Food Security
PPP	Public-Private Partnership
PPPP (4Ps)	Producer-Public-Private-Partnerships
PSC	Project Steering Committee
SA	Stock Assessments
SECAP	Social Environmental Climate Adaptation Procedures of IFAD
USD	United States Dollar
VIPL	Ventilation Improved Pit Latrine
WASH	Water, Sanitation and Hygiene

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Map of AFAP-2 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 | 02-08-2023

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EXECUTIVE SUMMARY

Plan Objective – The objective of this inaugural Annual Work Plan and Budget (AWPB) is, essentially, to set the stage for the effective implementation of the Artisanal Fisheries and Aquaculture Project – Phase 2 (AFAP-2). This plan primarily focuses on establishing processes and procedures that will guide the effective and successful implementation of the Project following established guidelines.

Strategic Approach and Focus – AFAP-2 will largely build on AFAP experience; AFAP was implemented in three of the five AFAP-2 target Provinces and generated and generated several lessons of experience that that informed AFAP-2 design. The Project’s implementation will also make use of lessons of experience generated by several ongoing or concluded projects funded by IFAD (e.g. Smallholder Resilience Enhancement Project (SREP) and Smallholder Agriculture Development and Commercialisation Project for the Provinces of Cuanza Sul and Huíla (SADCP - C&H)/SAMAP) and those funded by other donors.

This being the first year of AFAP-2 implementation, the approach to be employed during the course of 2025 will largely focus on establishing firm, but simple, processes and procedures to serve as a solid basis for Project implementation in the subsequent years. Essentially, the approach will include the following:

- a) Ensuring the Project Management Unit (PMU) core staff are recruited and adequately facilitated (in terms of skills and equipment) to work for the effective implementation of the Project;
- b) Liaising with ongoing Projects (funded by either IFAD, GoE or other GoE development partners) to exploit any existent synergies as a way of avoiding duplication and, therefore, ensuring effective resource use;
- c) Establishing effective collaboration between and among the different implementing institutions to ensure that the different activities are appropriately sequenced. This collaboration will also serve as a learning mechanism whereby some institutions will learn from others so as to pass on relevant experience and ensuring that past mistakes are avoided;
- d) Developing, and effectively communicating to all stakeholders, a reasonable schedule to ensure that they all know what to do, when to do it, and respecting all the implicit approval processes.

Summary Description of the 2025 Plan – The plan contained herein is summarised hereunder by components and subcomponents.

Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems – This component responds to Outcome 1 - *Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes*. The component will focus on expanding AFAP's successful interventions and lessons in climate-resilient and nutrition-sensitive fisheries and aquaculture production strategies. It comprises two subcomponents.

Subcomponent 1.1: Sustainable Inland Fisheries and Ecosystems – This subcomponent supports the sustainable utilization of inland fisheries resources and conservation of biodiversity in selected lagoons and river ecosystems, to ensure their high productivity and long-term viability. It aims to enhance productivity in inland fisheries by developing a community-owned co-management system that will promote the sustainable utilization of fisheries resources, to increase food security and resilience of rural fishing communities. The

Angola: Artisanal Fisheries and Aquaculture Project – Phase 2 (AFAP-2) Consolidated Annual Work Plan and Budget 2025

key result areas for this sub-component are: a) the establishment of effective inland fisheries co-management system; and b) the sustainable utilization of inland fisheries resources for incomes and nutrition. It will contribute to achieving *Output 1.1: Effective inland fisheries management system, participative climate and rural community development processes established*. The following activities are planned: a) community mobilization and social development for small-scale fisheries; b) Establishment and/or strengthening of Community Council of Fishers (CCPs); c) Establishment of effective inland fisheries monitoring, control and surveillance (MCS) system, which includes a participatory inland fisheries data and monitoring system; d) development of inland Lagoon Management Plans (LMPs); and e) Enhanced community access to inland fisheries for nutrition and incomes. The following activities are planned for AFAP-2's first year to gradually contribute to the subcomponent's objective:

- Establishment of new Community Council of Fisheries (CCPs) in project provinces¹;
- Feasibility assessments/baseline surveys for targeted lagoons;
- Development of Lagoon Management Plan²;
- Provision of support for Fisheries Specialist (12 months);
- Fisheries study³;
- Services in aquaculture favourable to youth integration and people with disabilities;
- Elaboration of targeting and social inclusion strategy⁴;
- Awareness and information campaign (non-media) about the project activities and the social inclusion strategy;
- Communication (mass media) on the project activities through tv, radio and audio broadcasts;
- Implementation of targeting and community mobilization actions;
- Institutional support to the structure in charge of literacy issues for development of functional literacy modules⁵;
- Development of functional literacy tools and multiplication of literacy manuals and tools;
- Organisation of functional literacy training sessions⁶;
- Gender mapping and gender capacity assessment of existing community-based organisations⁷;
- Staff Training on Gender Empowerment and Social Inclusion;
- Organisation of gender sensitisation across CCPs, cooperatives, associations (including "Resilience Funds groups");
- Training of women and support for the establishment of "Resilience Funds groups";
- Facilitated support for the establishment of VSLAs and "DIMITRA clubs" within the "Resilience Funds groups", CCPs or cooperatives/associations or other community-based;
- Conduct a baseline survey of nutrition core indicators in the project intervention area;
- Contribute to the feeding of the Food Security and Nutrition Information System (SISAN) at provincial level⁸;
- Capacity building of project stakeholders on community-based food and nutrition security;

¹Establishment of 50 new CCPs in 5 provinces

²Including frame surveys (FS), catch/stock assessment surveys (CAS), and evaluating their capacity for cage aquaculture

³It also includes a study on value chain characterization

⁴It also includes a youth, people with disabilities targeting and women's empowerment action plan

⁵Short cycle adapted for youth and women

⁶Including financial literacy

⁷ It includes CCPs, cooperatives, community associations, economic interest groups, etc.

⁸Establishment and feeding of a database of nutrition indicators in the project area

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- Developing a nutrition strategy (1 strategy);
- Identification of endogenous community facilitators;
- Provision of support to the Community Development, Social Inclusion and Nutrition Specialist (12 months);
- Salaries of extension workers⁹

Subcomponent 1.2: Resilient Business-Oriented Small-Scale Aquaculture Production – This subcomponent will involve implementation and promotion of sustainable aquaculture technologies, innovations and management practices that are climate smart, nutrition-sensitive and resource-use efficient. The subcomponent contributes to *Output 1.2: Resilient business-oriented small-scale aquaculture production and distribution capacities, and extension services established*. It will enhance capabilities of small-scale fish farmers, enabling them to boost production, and foster the development of resilient businesses within the aquaculture value chain, including non-fish farming stakeholders. Additionally, it aims to enhance nutrition results by promoting dietary diversity through integrated aquaculture-agriculture interventions. The subcomponent results will be delivered through the following specific activities: a) Community mobilization and social development for resilient aquaculture; b) development of the aquaculture suitability map; c) Establishment of sustainable small-scale aquaculture production systems (with a focus on community-based fish pond systems, cage aquaculture pilots in suitable lagoons, and selected aspects of integrated aquaculture-agriculture interventions); d) Capacity building of farmers in the established aquaculture production systems; and e) Enhanced supply of aquaculture inputs for increased productivity. Activities planned for the first year include:

- Updating the existing aquaculture suitability map;
- Procurement of seeds for fish-crop integrated system; and
- Provision of support to an aquaculture specialist (12 months).

Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development – This Component will contribute to the achievement of *Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurships and infrastructure providing services*. It aims at supporting Component 1 with the necessary infrastructure, market linkages and entrepreneurial capacities to deliver quality fisheries and aquaculture inputs and products linking the source, producer, intermediaries and the consumer. The component will play a key facilitative and intermediary role both on the inputs and output markets. It is built around strengthening of linkages and networks among value chain actors. Interventions include identification of viable investments and support to selected Producer-Public-Private-Partnerships (PPPPs (4Ps); development of essential value chain infrastructure (water supply systems for aquaculture, landing sites at lagoons, last-mile roads, first-point of sale input/output markets, sanitation facilities, intermediate markets, cold storage and processing facilities etc.); strengthening market linkages and promoting fisheries and aquaculture linked enterprises; business development services, especially to youth-operated enterprises along the value chain and financial linkages for the sustainable development of the sector. Focus will be placed on women, youth, the disabled and other vulnerable groups. The component consists of two Subcomponents.

Subcomponent 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries – This subcomponent will seek to establish and/or improve the efficiency and effectiveness of income-generating activities along the aquaculture and inland fisheries value chains. It contributes to *Output 2.1: Viable Enterprises for Improved Market Access Established*.

⁹It covers salaries for 3 extension workers per province, for a total of 15 people. IFAD will pay 100% of the salaries for the first 4 years. During Years 5&6, IFAD will pay 50% of the salaries. For Years 7&8, Government will pay 100% of the salaries.

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Accordingly, it will focus on strengthening inland and aquaculture inputs and outputs market linkages, enterprises, and financial services. Specifically, it will: a) facilitate sustainable delivery of fisheries and aquaculture inputs to beneficiaries; b) support the development of business orientation for the producer groups for sustainable production to improve commercialization and market participation; and c) improve value addition and market linkages through commercialization of the core activities of the inland fisheries and aquaculture value chain actors in the selected provinces to make them financially viable and bankable for the sustainable development of the sector. It will support interventions intended at broadening and deepening the fisheries and aquaculture value chains in Angola, with a series of strategic investments. In that regard, the use of Public-Private-Producers-Partnerships (PPPPs) will, especially, be promoted to operationalize the key public infrastructures rehabilitated/developed by the project as well as private anchor-producers to support access for inputs and markets for smallholder producers. The following interventions are planned for the first year:

- Undertaking of a detailed value chain and market assessment study (1); and
- Provision of support to a business development specialist (12 months);

Subcomponent 2.2: Enhancing Market Access and Infrastructure Establishment –

This will focus on market infrastructure to connect businesses, improve market access, and create a conducive environment for economic growth. The success of Angola's inland fisheries and aquaculture sector not only hinges on production capabilities but also relies on the establishment of robust market access infrastructure. The subcomponent contributes to *Output 2.2: Key Infrastructure for Improved Production and Market Access Established*. Where relevant, some of the foreseen interventions under this subcomponent will seek to employ the 4Ps approach that would ensure mutual benefits for all parties. The following activities are planned:

- Purchase of Two-wheelers (how many?);
- Purchase of Three-wheelers (how many?); and
- Provision of support to an infrastructure specialist.

Component 3: Institutional Strengthening, Policy Support and Project Management – The objective of the component is to enhance the institutional capacity of community-based/farmer organisations and public entities providing services to target beneficiaries in the Project areas. It also seeks to facilitate the pathways for the Project's effective implementation and inclusive functioning of the inland fisheries sector, from production/capture to consumption. It comprises two subcomponents.

Subcomponent 3.1: Institutional Strengthening and Policy Support – Interventions under this subcomponent will contribute to the achievement of Outcome 3: Strengthened institutions and policies for a sustainable and inclusive inland fisheries sector. The subcomponent has a dual focus: institutional strengthening and policy support.

Institutional Strengthening – The objective of this intervention is to augment the capacity of the institutions (public and private sector/community-based organisations) that will be responsible for overseeing and/or implementing the different Project activities. The activities planned for the first AWPB under this intervention:

- Institutional capacity gap assessment and production of a capacity development plan;
- Computer Support to National, Provincial and Municipal Staff for effective service delivery¹⁰ (15 desktops);

¹⁰Desktop with software and antivirus; 3 per province and a total of 15 for the 5 provinces.

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- Motorcycles for Logistical Support to the Provincial and Municipal Extension Agents¹¹;
- Staff training for both PMU and IPA staff - IFAD Clinics¹² -(a total 2 sessions);
- Motorcycle O&M¹³ (50 motorcycles);
- Motorcycle insurance (50 motorcycles).

Policy Support – The focus of this intervention will be to facilitate the development, review and update of policies and strategies in areas identified as critical for the effective and sustainable development of Angola’s inland fisheries. There are no activities planned under the policy arena for the first year.

Subcomponent 3.2: Project Management – This subcomponent will focus on putting process and procedures in place to ensure effectiveness in overall AFAP-2 management, planning and implementation, financial management and control, procurement, monitoring and evaluation, knowledge management, progress reporting, contracting and supervision of different service providers, etc. It will also ensure liaison and linkage with all other relevant projects/programmes being implemented in the country that seek to address similar or related constraints; this would be aimed at taking advantage of existent synergies and avoiding duplications. The following activities are planned:

- Double Cabin Vehicles (10)¹⁴;
- Office Rehabilitation;
- Laptops for the PMU staff (15)¹⁵;
- Desktops¹⁶ (15 desktops);
- Printer/Photocopier (7)¹⁷;
- Accounting software¹⁸;
- Safe boxes (6)¹⁹;
- Projects (6)²⁰;
- Video Conference Equipment (6)²¹;
- Server (1)²²;
- Internet Network Equipment²³;
- Office Furniture (15)²⁴
- Furniture for the Conference Room (1)²⁵;
- External audit (1);
- Internal audit (1);
- Start-up workshops (6)²⁶;
- Annual planning & review workshop;

¹¹10 motorcycles per province/municipality (3 per province and 7 for the municipalities in each province) for a total of 50 motorcycles

¹²Trainer DSA; interpreter fee and lunch costs. 3-day training to be combined with implementation support missions

¹³The unit cost is calculated as 10% of motorcycle cost price per motorcycle per year

¹⁴5 are for the PMU and 5 are for the 5 provinces (one each).

¹⁵1 Laptop for each PMU officer/specialist and 1 for each Provincial Coordinator. Laptop with software and antivirus.

¹⁶Desktop with software and antivirus; 5 are for the PMU while the other 5 are for the five provinces (1 for each province)

¹⁷5 of the printers are for the five provinces (1 for each province)

¹⁸It includes accounting software package, annual licenses and technical assistance

¹⁹5 of the Safes are for the five provinces (1 for each province)

²⁰5 of the Projectors are for the five provinces (1 for each province)

²¹5 are for the five provinces (1 for each province)

²²It includes: Server, software, uninterruptible power supply unit

²³5 of the packages are for the five provinces (1 for each province)

²⁴1 set for each officer/specialist. Each set consists of a desk, chair, lamp and a file cabinet

²⁵The set consists of a big table (sitting 12 people) and 20 chairs

²⁶1 at national level, and 5 at provincial level

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- M&E Workshop with project stakeholders to validate the M&E Manual, data collection and reporting tools (1);
- Tablets for data collection by extension staff (15)²⁷;
- Installation of Information Systems (MIS)/Software (1);
- Maintenance of the MIS/ Software (1);
- COI Surveys (Baseline) (1);
- Mapping the existing and new aquaculture and inland infrastructure and setting up a dashboard (1);
- Support for the Knowledge management specialist (12 months);
- Project Manager (12 months);
- Finance Management Officer (12 months);
- Monitoring and Evaluation Officer (12 months);
- Procurement and Contracts Manager (12 months);
- Internal Auditor (6 months);
- Accountant (12 months);
- Procurement Assistant (12 months);
- Monitoring and Evaluation Assistant (12 months);
- Driver (12 months);
- Provincial Coordinator (60 months)²⁸;
- Province Office assistant (60 months);
- Provincial Driver (60 months);
- Operating costs
 - Office space (PMU)²⁹ – 12 months;
 - Office space (5 Provinces) – 60 months³⁰;
 - General operating expenses for PMU³¹;
 - General operating expenses for Provinces;
 - Vehicle O & M;
 - Vehicle Insurance;
 - Field per diem.

Summary Budget and Financing – Presented in this section are summary tables giving an overall picture of financial resources required for the AFAP-2 2025 AWPB. The budget information is presented by component, financier and categories of expenditure. The total budget for AFAP-2's 2025 AWPB is about US\$ 4.07 million. A total of about US\$ 1.02 million (or 25% of the budget) is allocated to Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems; about US\$ 277,000 (or 6.8% of the budget) is allocated to Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development; and about US\$ 2.78 million (or 68.2% of the budget) is allocated to Component 3: Institutional Strengthening, Policy Support and Project Management. About 51% of the budget will be financed by the IFAD-12 PBSA; 16.8% will be financed by BRAM-12; 16.3% by the EU; and 16% will be from the Government. The following tables present the AFAP-2 AWPB costs by component, category and financier.

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²⁷Assuming 3 tablets/province

²⁸Provincial Coordinators will be getting a top-up to their government salaries

²⁹It includes: office space, security, all utilities and air-conditioning in the offices

³⁰It includes: office space, security, all utilities and air-conditioning in the offices

³¹It includes: consumable goods, stationery material and communication charges (Internet, telephone and postage services)

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Angola												
Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2)												
Components by Financiers												
(US\$ '000)												
	IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems												
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	424	47.8	78	8.8	282	31.8	34	3.9	68	7.6	887	21.8
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	22	16.7	12	8.9	98	74.3	0	0.1	-	-	132	3.2
Subtotal	446	43.8	90	8.8	380	37.3	34	3.4	68	6.7	1,019	25.0
B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development												
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	42	23.6	39	21.8	98	54.5	0	-	-	-	179	4.4
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	71	73.0	26	27.0	-	-	-	-	-	-	98	2.4
Subtotal	114	41.1	65	23.6	98	35.3	0	-	-	-	277	6.8
C. Component 3: Institutional Strengthening, Policy Support and Project Management												
1. Sub-component 3.1: Institutional Strengthening and Policy Support	179	67.4	-	-	50	18.6	37	14.0	-	-	266	6.5
2. Sub-component 3.2: Project Management	1,335	53.2	530	21.1	135	5.4	293	11.7	215	8.6	2,508	61.6
Subtotal	1,514	54.6	530	19.1	185	6.7	330	11.9	215	7.8	2,774	68.2
Total PROJECT COSTS	2,074	51.0	685	16.8	662	16.3	365	9.0	283	7.0	4,070	100.0

First Year Annual Work Plan and Budget and Financing by Category (US\$ '000)

Angola												
Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2)												
Expenditure Accounts by Financiers												
(US\$ '000)												
	IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs												
A. Works	64	62.8	24	23.2	-	-	14	14.0	-	-	102	2.5
B. Unallocated	-	-	-	-	-	-	-	-	-	-	-	-
C. Vehicles	75	23.9	51	16.1	-	-	189	60.0	-	-	315	7.8
D. Equipment, material, goods and services	337	71.7	67	14.3	-	-	66	14.0	-	-	470	11.5
E. Consultancies	614	55.2	217	19.5	282	25.3	0	-	-	-	1,113	27.4
F. Training and workshops	2	0.5	1	0.2	294	85.4	48	14.0	-	-	344	8.5
G. Grants and subsidies	-	-	-	-	-	-	-	-	-	-	-	-
H. Credit and guarantee funds	-	-	-	-	-	-	-	-	-	-	-	-
Total Investment Costs	1,092	46.6	359	15.3	575	24.6	317	13.5	-	-	2,344	57.6
II. Recurrent Costs												
A. Salaries and allowances	764	65.2	253	21.6	87	7.4	0	-	68	5.8	1,172	28.8
B. Operating Costs	218	39.4	73	13.1	-	-	47	8.6	215	38.9	554	13.6
Total Recurrent Costs	982	56.9	326	18.9	87	5.0	47	2.7	283	16.4	1,726	42.4
Total PROJECT COSTS	2,074	51.0	685	16.8	662	16.3	365	9.0	283	7.0	4,070	100.0

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I. INTRODUCTION

1.1. Country Background and the Project Area

1. Angola's economy is classified as a lower middle-income economy with an estimated 2023 nominal Gross Domestic Product (GDP) of US\$135.6 billion³². The country's GDP is largely dependent on the petroleum industry; it accounts for over 50% of the GDP and about 90% of export earnings³³. The country's economy has undergone a modest recovery since the height of the COVID-19 pandemic. Real GDP growth reached 3% in 2022, up from 1.1% in 2021. This GDP growth was mostly due to the sustained high oil prices in 2022 because of Russia's invasion of Ukraine³⁴; the average price per barrel for Angola's crude was US\$100.65, compared to the conservative US\$59.00 that the 2022 national budget was based on, generating estimated additional revenue of US\$17.18 billion. High oil revenues further widened the fiscal surplus to 3% of GDP in 2022 from 1.9% in 2021. However, moderated oil exports took the current account surplus down to 8.9% of GDP in 2022 from 11.2% in 2021, while the debt-to-GDP ratio declined further, to 56.1% from 82.9% over the same period³⁵.

2. Global inflation pressure from Russia's invasion of Ukraine was eased by improved terms of trade. The increased export revenue and agricultural production reduced food inflation and overall inflation from 25.8% in 2021 to an estimated 21.3% in 2022³⁶. The banking sector also improved, with more positive economic performance and lower private sector debt in 2022. Nevertheless, unemployment remains high, at 30%, and the country continues to face challenges in curbing the poverty rate (40.6% in 2019)³⁷. The Angolan kwanza appreciated significantly in 2022 but faced depreciation pressures in mid-2023. International reserves remain stable at around \$13 billion, providing a buffer for imports³⁸.

3. For 2023, Angola's economy displayed a mix of challenges and progress. GDP growth for 2023 is estimated at 1.3%, with both the oil and non-oil sectors underperforming. Despite the recent recovery in oil production, the average growth in 2023 is estimated to have declined compared to the 2022 level³⁹. The slight improvement in non-oil sector performance was offset by a decline in oil production.

4. For 2024, the International Monetary Fund (IMF) is forecasting Angola's real GDP growth to be 3%, slightly lower than the overall Sub-Saharan Africa average of 4%⁴⁰. Consumer price inflation is forecasted at 22.3% year-on-year, exceeding the regional average of 13.1%. The IMF forecast is not significantly different from the Angolan government's 2024 budget which assumes that economic growth in the country will accelerate to 2.8% in the year due to a significantly stronger performance in the non-oil sector (4.6%) and a lower contraction in the oil sector (-2.5%) from the previous year.

³²Wikipedia: Economy of Angola (https://en.wikipedia.org/wiki/Economy_of_Angola).

³³Economist Intelligence Unit, Angola Report, November 2023.

³⁴African Economic Outlook 2023, African Development Bank.

³⁵[African Economic Outlook 2023](#), African Development Bank.

³⁶Ibid.

³⁷Ibid.

³⁸Ibid.

³⁹[Angola Overview: Development news, research, data | World Bank](#)

⁴⁰Capital Business ([Angolan economy to grow 3 pct in 2024: IMF - Capital Business \(capitalfm.co.ke\)](#))

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5. According to the UN data portal (2022)⁴¹, Angola's population is estimated at about 35.6 million people and projected to reach about 37.8 million people by 2024. Angola's population is growing at about 2% annually; the birth rate is 38.6 births per 1,000 people and the fertility rate is 5.04 births per woman.

6. *Project Target Area* – AFAP-2's geographic areas of intervention will build on provinces piloted under AFAP. Based on the understanding reached with GoA, it is better to consolidate resources in a few provinces for greater impact and maintaining a focus in rural areas, in line with IFAD's mandate. Accordingly, AFAP-2 geographical targeting will include the following five provinces: Bengo, Bie, Cuanza Norte Malanje, and Uige. The choice of these provinces, in agreement with the Government, was based on a logic of scaling up the positive achievements of AFAP and combines several criteria, including: a) the geographic proximity to the AFAP provinces and relevance to the Project's double focus on fisheries co-management and aquaculture potential; b) the necessity to converge IFAD's interventions where they will have a significant impact on poor and vulnerable populations, particularly those most affected by food and nutrition insecurity.

1.2. Inland Fisheries and Rural Development Context

7. The Angolan inland fisheries and small-scale aquaculture sectors present a substantial and mostly underexploited prospects for fostering local economic development. This includes addressing poverty, alleviating food insecurity, and generating employment opportunities for the local people, including youth and women. It is, therefore, a source of primary driver for rural development.

8. In 2021, Angola's fish production was about 531,772 tons⁴²; this accounted for approximately 4.1% of the country's GDP, positioning the fisheries as the third most economically significant sector⁴³. Aligned with the goals outlined in Angola's national development plan 2020-2025⁴⁴, there is an envisaged growth in the fisheries sector's GDP contribution, aiming to reach 4.5 percent by the year 2027⁴⁵.

9. It should be pointed out that the majority of fisheries production is concentrated in the marine sector, constituting 94%, while inland fisheries contribute approximately 5.7% of the overall production. Despite its relatively lower production volume, the inland fisheries sector holds significant potential to play a crucial role in the national economy, especially as source of livelihood and sustenance for local communities at artisanal levels⁴⁶.

10. The primary inland water bodies (rivers) that support inland fisheries include: a) Chiloango (in Cabinda Province); b) Congo (Zaire); c) Cuango (Lunda Sul); d) Cassai (Lunda Sul); e) Kwanza (Bié to Luanda); f) Cunene (Huambo to Namibe); g) Zambeze (Moxico); and h) Cubango (Huambo to Kwando Kubango). The Kwanza River, entirely situated in Angola, is the second-largest river after the Congo River. In addition, there are five significant lagoons, each located in the provinces of Kwanza Norte, Huambo, Bié, Cunene, and Moxico. Inland fish catches are predominantly comprised of tilapia (*Oreochromis andersoli*, *Tilapia rendali*, *Oreochromis niloticus*), African catfish (*Clarias gariepinus*), and carps (*Cyprinus carpio*), with most of the catch attributed to artisanal fishers. However, there is scanty scientific information regarding: a) water quality issues

⁴¹<https://www.bing.com/search?q=United+Nations+Data+Portal+-+Population+Division&cvid>

⁴²<https://www.ceicdata.com/en/angola/agricultural-production-and-consumption/ao-total-fisheries-production>

⁴³<https://www.worldbank.org/en/country/angola/overview>

⁴⁴<https://www.effectivecooperation.org/angolas-national-development-vision-and-plans>

⁴⁵<https://www.google.com/search?q=current+contribution+of+fisheries+of+gdp+of+angola>

⁴⁶FAO 2018

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and ecosystem health; c) fisheries catch statistics; and c) production capacity of the inland lagoons and rivers and fishing effort.

11. Angola's inland fishing operations are exclusively artisanal, encompassing both commercial and subsistence activities, and do not involve semi-industrial fisheries. The inland fishing areas consist of small to medium-sized artificial and natural lakes, rivers, and expansive floodplains; there are no significant large water bodies. Due to the absence of a census for this sub-sector, there is no reliable estimates available for the number of fishers and boats. Fishers are regarded as one of the most vulnerable groups within Angola's rural population.

12. Despite Angola's abundant inland aquatic resources, numerous challenges persist. These include: a) the absence of financial resources; b) inadequate training and information; c) precarious infrastructure; d) insufficient storage facilities; e) post-catch treatment capabilities; f) processing limitations; g) transportation challenges; h) ineffective distribution channels; i) quality management issues; j) market asymmetries; k) seasonal concerns; l) general system inefficiency; and m) lack of widespread business vision among all involved actors⁴⁷.

13. Thus, achieving and sustaining an annual inland fisheries production of 5.7% (30,000 tons) highlights the necessity for the adoption of innovative technologies to ensure the sustainable utilization of inland aquatic resources. Field visits and observations in sampled lagoons indicate a requirement for improvements, including the development of road infrastructure, establishment of landing sites, and the provision of training to fishers in sustainable fishing practices and value addition techniques⁴⁸. These measures aim to enhance production levels and strengthen market linkages.

1.3. Key Stakeholders and Involvement of Smallholders

14. GoA institutions at different levels (national, provincial, municipality) have an inherent interest in the successful implementation of AFAP-2. The the Ministry of Fisheries and Marine Resources (MINPERMAR) will be the Project's lead implementing agency and the Institute for the Development of Artisanal Fisheries and Aquaculture (IPA) will have the responsibility of overseeing the Project's implementation. IPA will delegate the day-to-day management of the Project to a PMU. The Project delivery systems will be integrated into the decentralised organisational structures that cascade from the national to municipality levels. Thus, AFAP-2's institutional arrangements for coordination will be specified at three levels – national, provincial, and municipality.

15. At the Provincial level, AFAP-2 implementation will be coordinated by the IPA Representatives; they will serve as the AFAP-2 Provincial Coordinators and they will be supported by an Office Assistant and a Driver. An AFAP-2 Focal Person, based in Luanda, will be appointed, from MINPERMAR staff, to serve as a Liaison Officer on AFAP-2 related aspects in Luanda, as and when needed.

16. At the municipality level, initiation of all AFAP-2 activities will necessarily require consultation with the Municipality Administrators; this will be aimed at ensuring that Municipality Administrators are aware of AFAP-2's interventions in their communities and could be called upon for facilitation whenever considered necessary.

17. Communities/smallholders and their organisations are the central focus of AFAP-2; they will be involved variously during the course of project implementation. Their involvement, not only as beneficiaries but also as active participants, will ensure ownership of the Project and sustainability of the different interventions. Community mobilisation, awareness

⁴⁷Market Study on the Supply and Demand of Continental Fish and Small-Scale Aquaculture, IPA 2019

⁴⁸AFAP PCR and AFAP PCN Reports

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creation and participatory community development planning will be the first step to AFAP-2 implementation. That, *de facto*, makes Community-Based Organisations (CBOs) key players in identifying the existent community/smallholders' problems, prioritizing them, development of Community Development Plans (CDPs) and oversee the process of implementing subprojects that will emanate from the CDPs. The design process established that many of these institutions have various capacity limitations. Accordingly, the respective institutions' capacities will be augmented through capacity strengthening interventions.

1.4. Focus of the Project

18. The Artisanal Fisheries and Aquaculture Project (AFAP)⁴⁹, implemented during the period 2015-2023, successfully demonstrated that small-scale inland fisheries can significantly contribute to better rural livelihoods through increased incomes and improved food and nutrition security. However, AFAP also established that there are still some aspects of the subsector that need to be addressed in order to make it a more competitive and sustainable conduit to improved rural livelihoods. Some of such challenges include: a) inadequate inland extension service provision; b) lack of appropriate infrastructure and equipment; c) a need for more effective market access arrangements; d) limited access to quality aquaculture inputs (seed and feed); e) limited availability of a skilled workforce and technical knowledge on aquaculture value chain; f) lack of a supportive policy environment to help guide and protect the growth of the subsector; etc.

19. Accordingly, GoA has requested IFAD to liaise with its development partners and support an intervention to: a) scale-up AFAP's tested and proven technologies to other parts of the country to not only help improve income/reduce poverty, food and nutrition security but also reduce fish imports; and b) address the inland fisheries' challenges, as identified by AFAP, in order to provide a firm foundation for the sustainable growth and expansion of the subsector. In the process, GoA has put emphasis on the need to address the inherent technical, social, environmental and climate change-related aspects to make the interventions more effective and sustainable.

II. SUMMARY OF PROJECT DESCRIPTION

2.1 Goal, Objective and Strategic Approach

20. Project Goal and Objective – AFAP-2's goal is to '*contribute to improved household income, food and nutrition security through sustainable and climate resilient fisheries and aquaculture*'. The Project Development Objective (PDO) is to '*contribute to the reduction of rural poverty and food insecurity of smallholders in the target provinces by developing their economic potential while improving natural resources management capacity and resilience to climate change*'. The Project will be implemented over an eight-year period. AFAP-2 will be implemented over an eight-year period.

21. Approach – The target beneficiaries will be in the 'driver's seat' of AFAP-2 implementation. The Project will use a facilitated community development planning approach linked to the elaboration and implementation of inclusive CDPs that identify and prioritise challenges (production, market and infrastructure-related) that would need to be addressed in order to provide viable and sustainable livelihoods for the target rural communities. The engagement/participation of the beneficiaries in the process enables the

⁴⁹The original AFAP, implemented from 2015 to 2023, was restructured, at the MTR stage in 2018, to make it more effective; its focus was changed from being an investment project to piloting selected technologies. Thus, AFAP successfully tested the social, economic and technical viability of two technologies; smallholder aquaculture and fisheries co-management.

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growth of social capital between communities; it also strengthens vertical engagements with local governments. The likelihood for sustainability will also be enhanced through this implementation approach since the process will be managed by the beneficiary communities themselves.

2.2 Target Group

22. Target Groups – AFAP-2 will directly target a total of 31,000 vulnerable, poor and disadvantaged rural households engaged or willing to engage in artisanal fisheries and aquaculture. This corresponds to about 148,000 household members. The target group includes individual fish farmers (or aquaculture promoters), cooperatives or groups, small family farms, rural households including those headed by women, active rural women and youth or with diversified potential for economic and professional integration in aquaculture linkages. The project will focus, particularly, on rural communities that are economically and socially vulnerable, such as: a) artisanal fishermen who are food and nutrition insecure; b) people with disabilities; c) ex-combatants and other disadvantaged groups; d) people affected by climate change and/or people living with HIV/AIDS, etc.

2.3 Component Summary Description

23. The Project's Development Objective will be achieved through the effective implementation of two technical components and a third component that will focus on augmenting the capacity of communities, institutions, and contributing to a conducive policy environment towards AFAP-2 implementation. Following hereunder is a summary of the expected focus of the different components and subcomponents.

24. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems – This component responds to Outcome 1 - *Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes*. The component will focus on expanding AFAP's successful interventions and lessons in climate-resilient and nutrition-sensitive fisheries and aquaculture production strategies. This will involve the mobilization and capacity building of rural producers in targeted areas through enhanced access to technical and non-technical knowledge, skills, production assets and conducive policy environment for production and management of small-scale aquaculture and inland fisheries.

25. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development – This Component will contribute to the achievement of *Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurships and infrastructure providing services*. It aims at supporting Component 1 with the necessary infrastructure, market linkages and entrepreneurial capacities to deliver quality fisheries and aquaculture inputs and products linking input sources, producers, intermediaries and the consumer. The component will play a key facilitative and intermediary role both on the inputs and output markets. It is shaped around strengthening of linkages and networks among value chain actors. Interventions include identification of viable investments and support to selected PPPs; development of essential value chain infrastructure (water supply systems for aquaculture, landing sites at lagoons, last-mile roads, first-point of sale input/output markets, sanitation facilities, intermediate markets, cold storage and processing facilities etc.); strengthening market linkages and promoting fisheries and aquaculture linked enterprises; business development services through incubation and mentorship especially to youth-operated enterprises along the value chain and financial linkages for the sustainable development of the sector. Focus will be placed on women, youth, the disabled and other vulnerable groups.

26. Component 3: Institutional Strengthening, Policy Support and Project Management – The objective of the component is to enhance the institutional capacity of

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community-based/farmer organisations and public entities providing services to target beneficiaries in the Project areas and facilitating the pathways for the Project's effective implementation.

2.4 Project Cost and Financing by Component

27. Total AFAP-2 cost is estimated at US\$90 million over an 8-year period. A summary breakdown of the AFAP-2 costs by component and by categories of expenditure is shown in the below tables.

Table 1: AFAP-2 Costs by Component

Components by Financiers (US\$ '000)		IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Beneficiaries (in-kind)		Private Sector (in-kind)		Total		For. Exch.	Local (Excl. Taxes)
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%		
		A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems 1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem 3,827 35.2 860 7.9 4,839 44.5 746 6.9 604 5.6 - - - - 10,786 12.1 1,451 8,679 2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production 8,035 46.0 102 0.6 2,070 11.8 2,316 13.2 - - 4,956 28.4 - - 17,478 19.4 7,855 7,308 Subtotal 11,862 41.8 962 3.4 6,908 24.4 3,062 10.8 604 2.1 4,956 17.5 - - 28,554 31.5 9,305 15,987 B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development 1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries 11,463 53.4 7,644 35.6 870 4.1 4 - - - - 1,483 6.9 21,465 23.8 9,726 11,735 2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment 12,811 67.2 2,143 11.2 - - 2,547 13.4 - - - - 1,559 8.2 19,060 21.2 9,356 7,158 Subtotal 24,274 59.9 9,787 24.1 870 2.1 2,551 6.3 - - - - 3,043 7.5 40,525 45.0 19,081 18,893 C. Component 3: Institutional Strengthening, Policy Support and Project Management 1. Sub-component 3.1: Institutional Strengthening and Policy Support 1,479 42.9 357 10.3 1,325 38.4 289 8.4 - - - - 3,450 3.8 551 2,610 2. Sub-component 3.2: Project Management 10,164 57.5 3,895 22.0 896 5.1 798 4.5 1,919 10.9 - - - - 17,671 19.6 1,423 15,181 Subtotal 11,643 55.1 4,252 20.1 2,221 10.5 1,087 5.1 1,919 9.1 - - - - 21,122 23.5 1,975 17,792 Total PROJECT COSTS 47,780 53.1 15,000 16.7 10,000 11.1 6,700 7.4 2,523 2.8 4,956 5.5 3,043 3.4 90,001 100.0 30,361 52,671																	

Table 2: AFAP-2 Costs by Category of Expenditure

Expenditure Accounts by Financiers (US\$ '000)		IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Beneficiaries (in-kind)		Private Sector (in-kind)		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
		Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
		I. Investment Costs A. Works 10,272 68.3 1,561 10.4 - - 2,107 14.0 - - - - 1,108 7.4 15,048 16.7 7,524 5,417 2,107 B. Unallocated 54 100.0 - - - - - - - - - - 54 0.1 - 54 - C. Vehicles 118 23.9 80 16.1 - - 296 60.0 - - - - - 493 0.5 197 - 296 D. Equipment, material, goods and services 10,578 54.0 851 4.3 - - 2,741 14.0 - - 4,956 25.3 451 2.3 19,576 21.8 9,788 7,048 2,741 E. Consultancies 9,108 61.2 3,141 21.1 2,624 17.6 0 - - - - - 14,872 16.5 4,543 10,329 - F. Training and workshops 122 1.5 45 0.6 6,601 83.9 1,102 14.0 - - - - - 7,870 8.7 70 6,698 1,102 G. Grants and subsidies 7,344 53.4 6,418 46.6 - - - - - - - - - 13,761 15.3 6,881 6,881 - H. Credit and guarantee funds 1,232 45.4 - - - - -0 - - - - 1,483 54.6 2,716 3.0 1,358 1,358 - Total Investment Costs 38,826 52.2 12,096 16.3 9,225 12.4 6,245 8.4 - - 4,956 6.7 3,043 4.1 74,391 82.7 30,361 37,784 6,245 II. Recurrent Costs A. Salaries and allowances 6,809 65.2 2,257 21.6 775 7.4 0 - 604 5.8 - - - - 10,445 11.6 - 10,445 - B. Operating Costs 2,145 41.5 647 12.5 - - 455 8.8 1,919 37.1 - - - - 5,165 5.7 - 4,442 723 Total Recurrent Costs 8,954 57.4 2,904 18.6 775 5.0 455 2.9 2,523 16.2 - - - - 15,611 17.3 - 14,887 723 Total PROJECT COSTS 47,780 53.1 15,000 16.7 10,000 11.1 6,700 7.4 2,523 2.8 4,956 5.5 3,043 3.4 90,001 100.0 30,361 52,671 6,968																		

28. AFAP-2 will be financed through the contributions from the following financiers: FAD's contribution is estimated at US\$62.78 million (or 69.8) of AFAP-2's total cost. This comprises: a) about US\$47.78 million from the IFAD-12 financing cycle; and b) US\$15 million from the Borrowed Resources Access Mechanism (BRAM) of the IFAD-12 financing cycle (BRAM-12). GoA's contribution is estimated at US\$9.2 million (equivalent to 10.2% of total project cost) while the target beneficiaries are expected to contribute US\$5 million; about 5.5% of the total AFAP-2 costs. The EU is expected to provide co-finance of about

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US\$10 million; representing about 11.1 percent of the total AFAP-2 costs. The remaining US\$3.04 million (or 3.4%) is to be contributed from the private sector.

2.5 Project Organization and Implementation Arrangements

29. *Project Management* – Management of the AFAP-2 Project will largely follow the AFAP management arrangements with some modifications aimed at improving effectiveness and efficiency of implementation. The Project delivery systems will be integrated into the decentralised organisational structures that cascade from the national to communal levels. MINPERMAR will be the Project’s lead implementing agency and IPA will have the responsibility of overseeing the Project’s implementation. IPA will delegate the day-to-day management of the Project to a PMU. The PMU will recruit a core team of experienced staff to manage and oversee AFAP-2 implementation. It will also have access to Technical Assistance (TA) for some of the expertise that will be needed for effective Project implementation. The following is the foreseen PMU composition: a) Project Manager; b) Finance Management Officer; c) Monitoring and Evaluation Officer; d) Procurement and Contracts Manager; e) Aquaculture Specialist; f) Fisheries Specialist; g) Business Development Specialist; h) Infrastructure Specialist (TA); i) Social Inclusion and Nutrition Specialist; j) Internal Auditor (TA); k) Accountant; l) Procurement Assistant; m) Monitoring and Evaluation Assistant; n) Project Assistant; and o) Driver (3). The Terms of Reference (ToRs)/Job Descriptions (JoDs) of all the PMU staff and TAs are presented in the Project Implementation Manual (PIM).

30. Unlike the AFAP implementation arrangements, AFAP-2 embraces a more decentralized approach with the Provincial structures actively engaged in project implementation, including producing provincial work plans and budgets, implementation of field activities and provincial-focused progress reporting. In line with this decentralised approach, the PMU will be located in Cuanza Norte, one of the five participating provinces. Cuanza Norte is more centrally located, considering the other four participating provinces. This arrangement will make Project management more effective by locating the PMU close to the target beneficiaries and reducing monitoring-related costs during the course of Project implementation.

31. At the Provincial level, AFAP-2 implementation will be coordinated by the IPA Representatives; they will serve as the AFAP-2 Provincial Coordinators and they will be supported by an Office Assistant and a Driver. An AFAP-2 Focal Person, based in Luanda, will be appointed, from MINPERMAR staff, to serve as a Liaison Officer on AFAP-2 related aspects in Luanda, as and when needed.

32. At the municipality level, initiation of all AFAP-2 activities will necessarily require consultation with the Municipality Administrators; this will be aimed at ensuring that Municipality Administrators are aware of AFAP-2’s interventions in their communities and could be called upon for facilitation whenever considered necessary.

33. With regard to the oversight function a Project Steering Committee (PSC) will be established at the national level and chaired by the MINPERMAR Minister. It will be composed of members from institutions with direct relevance to the achievement of AFAP-2’s development objective (such as Ministry of Public Works, Urbanism and Housing (MINOPUH), Ministry of Energy and Water (MINEA), Ministry of Culture and Tourism (MCTA), and the Ministry of Environment (MINAMB). Considering that AFAP-2 will employ an integrated approach, including promoting of selected livestock, it is recommended that the Ministry of Agriculture and Forestry (MINAGRIF) be a member of the PSC.

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34. At the provincial level, a Provincial Project Steering Committee (PPSC) will be established in each participating province, chaired by the Provincial Governor. The PPSC composition will include the Provincial Director of Agriculture, Livestock and Fisheries Directorate, the Provincial IPA representative, a representative of civil society or NGO, a representative of the private sector, at least two representatives of beneficiaries/producers' organisations and any other representative that may be deemed necessary in guiding AFAP-2's effective implementation.

2.6 Beneficiaries, Expected Benefits and Sources

35. AFAP-2 plans to directly target a total of 31,000 vulnerable, poor and disadvantaged rural households engaged or willing to engage in artisanal fisheries and aquaculture. This corresponds to 148,000 household members. The target group includes individual fish farmers (or aquaculture promoters), cooperatives or groups, small family farms, rural households including those headed by women, active rural women and youth or with diversified potential for economic and professional integration in aquaculture linkages. The project will focus, particularly, on rural communities that are economically and socially vulnerable, such as: a) artisanal fishermen who are food and nutrition insecure; b) people with disabilities; c) ex-combatants and other disadvantaged groups; d) people affected by climate change and/or people living with HIV/AIDS, etc.

36. AFAP-2 will use a variety of targeting mechanisms to ensure equitable participation in, and benefits from, Project activities and opportunities for women, men, youth and vulnerable groups. The project will implement a participatory, inclusive and flexible targeting strategy based on a multi-dimensional targeting approach: a) geographical targeting of production basins and socio-economic targeting; b) direct targeting; and c) self-targeting. All these approaches will be backed up by facilitation and empowerment measures to promote fisheries and aquaculture entrepreneurship and increase opportunities for the vulnerable to be included in economic activities likely to improve their well-being. The mechanisms selected will be based on eligibility criteria to be established in a participatory, transparent and collaborative manner with the stakeholders in the sector and those supporting the development of climate change resilient lagoon fisheries and aquaculture. As a starting point, awareness-raising, nutritional education, the targeting mechanism and the eligibility criteria for the economic initiatives to be submitted through the applications, will be carried out for potential beneficiaries and will cover the entire population of the intervention localities.

37. The economic and financial analysis shows that a wide adoption of proposed interventions in the fishery and aquaculture sectors would have important financial and economic benefits in the form of better on-farm economic returns, households' livelihood, and reduced poverty of rural communities depending on fishery in the lagoons. Results suggest significant potential for creating positive net cash flows for targeted households in their productive activities through AFAP-2 interventions (especially for the aquaculture ponds), confirming attractiveness for the farmers. Cash flows show that the households will have the capacity to cover the necessary operating costs.

III. SUMMARY OF IMPLEMENTATION TO-DATE

38. This chapter is supposed to present the summary of achievements to date both in physical terms (physical achievements in relation to targets) and financial terms (disbursement status). It is also supposed to highlight the constraints encountered during implementation (thus far); the constraints highlighted are supposed to be addressed for improved implementation. Lastly, the chapter is supposed to state the number of target

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beneficiaries reached, disaggregated by gender. However, this is the first Project year of the 8-year Project and, as such, there is no implementation progress to report herein. But, as part of the design process, some steps, such as preparation of this draft AWPB, Procurement Plan and the Project Implementation Manual, were undertaken. These will greatly help kick-start actual, on-the-ground, Project implementation once AFAP-2 gets launched.

IV. THE 2025 WORK PLAN

4.1 The Planning Process

39. Ideally, the planning process for an Annual Work Plan and Budget should be participatory, involving all the relevant stakeholders through consultative meetings/workshops at various levels. Under such a situation, there are three major sources of information and these include:

- a) Project Design Report – it provides the general framework for Project implementation;
- b) the findings of the needs assessment and participatory planning exercises in the Project areas; and
- c) the findings of annual strategic reviews and performance evaluation.

40. However, this being AFAP-2's first AWPB, its preparation was largely based on the Project Design Report and was prepared as part of the design process. It is expected that starting with the 2026 AWPB onwards, the decentralised and participatory planning process will take over where the process will, necessarily, utilise all three sources of information as listed above.

4.2 Plan Focus

41. This being the first AFAP-2 Year, the focus of the plan is to put processes and procedures in place to facilitate a smoother implementation of the Project during the proceeding Project Years. This will include: a) establishing of the AFAP-2 coordination structures at the national, provincial and municipality levels; b) establish the national Project Steering Committee and introduce AFAP-2 to it. Agree on how to proceed with the provision of the oversight function (frequency and modality of meetings); c) initiate the undertaking of the AFAP-2 baseline survey; d) conduct awareness creation on AFAP-2 objectives and implementation arrangements; e) review and finalise the targeting strategy for the selection of the specific participating communes; etc.

42. It is hoped that once the systems have been put in place, subsequent AWPBs will benefit and receive effective implementation. However, in the event that the specified activities get completed before the end of the Project year, the PCMU will revise the AWPB and include additional activities. When/if such a revision is done, the revised AWPB would be resubmitted to the PSC for review and approval and to IFAD for review and provision of a No Objection.

4.3 Description of the Work Plan

43. Following below is the description of the work plan; this has been done by component and subcomponent.

44. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems – This component responds to Outcome 1 - *Improved and resilient*

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inland fisheries and small-scale aquaculture production, contributing to increased rural incomes. The component will focus on expanding AFAP's successful interventions and lessons in climate-resilient and nutrition-sensitive fisheries and aquaculture production strategies. It comprises two subcomponents.

45. Subcomponent 1.1: Sustainable Inland Fisheries and Ecosystems – This subcomponent supports the sustainable utilization of inland fisheries resources and conservation of biodiversity in selected lagoons and river ecosystems, to ensure their high productivity and long-term viability. It aims to enhance productivity in inland fisheries by developing a community-owned co-management system that will promote the sustainable utilization of fisheries resources, to increase food security and resilience of rural fishing communities. The key result areas for this sub-component are: a) the establishment of effective inland fisheries co-management system; and b) the sustainable utilization of inland fisheries resources for incomes and nutrition. It will contribute to achieving *Output 1.1: Effective inland fisheries management system, participative climate and rural community development processes established.* The following activities are planned: a) community mobilization and social development for small-scale fisheries; b) Establishment and/or strengthening of Community Council of Fishers (CCPs); c) Establishment of effective inland fisheries monitoring, control and surveillance (MCS) system, which includes a participatory inland fisheries data and monitoring system; d) development of inland Lagoon Management Plans (LMPs); and e) Enhanced community access to inland fisheries for nutrition and incomes. The following activities are planned for AFAP-2's first year to gradually contribute to the subcomponent's objective:

- Establishment of new Community Council of Fisheries (CCPs) in project provinces⁵⁰;
- Feasibility assessments/baseline surveys for targeted lagoons;
- Development of Lagoon Management Plan⁵¹;
- Provision of support for Fisheries Specialist (12 months);
- Fisheries study⁵²;
- Services in aquaculture favourable to youth integration and people with disabilities;
- Elaboration of targeting and social inclusion strategy⁵³;
- Awareness and information campaign (non-media) about the project activities and the social inclusion strategy;
- Communication (mass media) on the project activities through tv, radio and audio broadcasts;
- Implementation of targeting and community mobilization actions;
- Institutional support to the structure in charge of literacy issues for development of functional literacy modules⁵⁴;
- Development of functional literacy tools and multiplication of literacy manuals and tools;
- Organisation of functional literacy training sessions⁵⁵;
- Gender mapping and gender capacity assessment of existing community-based organisations⁵⁶;
- Staff Training on Gender Empowerment and Social Inclusion;
- Organisation of gender sensitisation across CCPs, cooperatives, associations (including "Resilience Funds groups");

⁵⁰Establishment of 50 new CCPs in 5 provinces

⁵¹Including frame surveys (FS), catch/stock assessment surveys (CAS), and evaluating their capacity for cage aquaculture

⁵²It also includes a study on value chain characterization

⁵³It also includes a youth, people with disabilities targeting and women's empowerment action plan

⁵⁴Short cycle adapted for youth and women

⁵⁵Including financial literacy

⁵⁶ It includes CCPs, cooperatives, community associations, economic interest groups, etc.

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- Training of women and support for the establishment of "Resilience Funds groups";
- Facilitated support for the establishment of VSLAs and "DIMITRA clubs" within the "Resilience Funds groups", CCPs or cooperatives/associations or other community-based;
- Conduct a baseline survey of nutrition core indicators in the project intervention area;
- Contribute to the feeding of the Food Security and Nutrition Information System (SISAN) at provincial level⁵⁷;
- Capacity building of project stakeholders on community-based food and nutrition security;
- Developing a nutrition strategy (1 strategy);
- Identification of endogenous community facilitators;
- Provision of support to the Community Development, Social Inclusion and Nutrition Specialist (12 months);
- Salaries of extension workers⁵⁸

46. Subcomponent 1.2: Resilient Business-Oriented Small-Scale Aquaculture Production – This subcomponent will involve implementation and promotion of sustainable aquaculture technologies, innovations and management practices that are climate smart, nutrition-sensitive and resource-use efficient. The subcomponent contributes to *Output 1.2: Resilient business-oriented small-scale aquaculture production and distribution capacities, and extension services established*. It will enhance capabilities of small-scale fish farmers, enabling them to boost production, and foster the development of resilient businesses within the aquaculture value chain, including non-fish farming stakeholders. Additionally, it aims to enhance nutrition results by promoting dietary diversity through integrated aquaculture-agriculture interventions. The subcomponent results will be delivered through the following specific activities: a) Community mobilization and social development for resilient aquaculture; b) development of the aquaculture suitability map; c) Establishment of sustainable small-scale aquaculture production systems (with a focus on community-based fish pond systems, cage aquaculture pilots in suitable lagoons, and selected aspects of integrated aquaculture-agriculture interventions); d) Capacity building of farmers in the established aquaculture production systems; and e) Enhanced supply of aquaculture inputs for increased productivity. Activities planned for the first year include:

- Updating the existing aquaculture suitability map;
- Procurement of seeds for fish-crop integrated system; and
- Provision of support to an aquaculture specialist (12 months).

47. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development – This Component will contribute to the achievement of *Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurships and infrastructure providing services*. It aims at supporting Component 1 with the necessary infrastructure, market linkages and entrepreneurial capacities to deliver quality fisheries and aquaculture inputs and products linking the source, producer, intermediaries and the consumer. The component will play a key facilitative and intermediary role both on the inputs and output markets. It is built around strengthening of linkages and networks among value chain actors. Interventions include identification of viable investments and support to selected Producer-Public-Private-Partnerships (PPPPs (4Ps)); development of essential value chain infrastructure (water supply systems for aquaculture, landing sites at lagoons, last-

⁵⁷Establishment and feeding of a database of nutrition indicators in the project area

⁵⁸It covers salaries for 3 extension workers per province, for a total of 15 people. IFAD will pay 100% of the salaries for the first 4 years. During Years 5&6, IFAD will pay 50% of the salaries. For Years 7&8, Government will pay 100% of the salaries.

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mile roads, first-point of sale input/output markets, sanitation facilities, intermediate markets, cold storage and processing facilities etc.); strengthening market linkages and promoting fisheries and aquaculture linked enterprises; business development services, especially to youth-operated enterprises along the value chain and financial linkages for the sustainable development of the sector. Focus will be placed on women, youth, the disabled and other vulnerable groups. The component consists of two Subcomponents.

48. Subcomponent 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries – This subcomponent will seek to establish and/or improve the efficiency and effectiveness of income-generating activities along the aquaculture and inland fisheries value chains. It contributes to Output 2.1: *Viable Enterprises for Improved Market Access Established*. Accordingly, it will focus on strengthening inland and aquaculture inputs and outputs market linkages, enterprises, and financial services. Specifically, it will: a) facilitate sustainable delivery of fisheries and aquaculture inputs to beneficiaries; b) support the development of business orientation for the producer groups for sustainable production to improve commercialization and market participation; and c) improve value addition and market linkages through commercialization of the core activities of the inland fisheries and aquaculture value chain actors in the selected provinces to make them financially viable and bankable for the sustainable development of the sector. It will support interventions intended at broadening and deepening the fisheries and aquaculture value chains in Angola, with a series of strategic investments. In that regard, the use of Public-Private-Producers-Partnerships (PPPPs) will, especially, be promoted to operationalize the key public infrastructures rehabilitated/developed by the project as well as private anchor-producers to support access for inputs and markets for smallholder producers. The following interventions are planned for the first year:

- Undertaking of a detailed value chain and market assessment study (1); and
- Provision of support to a business development specialist (12 months);

49. Subcomponent 2.2: Enhancing Market Access and Infrastructure Establishment – This will focus on market infrastructure to connect businesses, improve market access, and create a conducive environment for economic growth. The success of Angola's inland fisheries and aquaculture sector not only hinges on production capabilities but also relies on the establishment of robust market access infrastructure. The subcomponent contributes to Output 2.2: *Key Infrastructure for Improved Production and Market Access Established*. Where relevant, some of the foreseen interventions under this subcomponent will seek to employ the 4Ps approach that would ensure mutual benefits for all parties. The following activities are planned:

- Purchase of Two-wheelers (how many?);
- Purchase of Three-wheelers (how many?); and
- Provision of support to an infrastructure specialist.

50. Component 3: Institutional Strengthening, Policy Support and Project Management – The objective of the component is to enhance the institutional capacity of community-based/farmer organisations and public entities providing services to target beneficiaries in the Project areas. It also seeks to facilitate the pathways for the Project's effective implementation and inclusive functioning of the inland fisheries sector, from production/capture to consumption. It comprises two subcomponents.

51. Subcomponent 3.1: Institutional Strengthening and Policy Support – Interventions under this subcomponent will contribute to the achievement of Outcome 3: Strengthened institutions and policies for a sustainable and inclusive inland fisheries sector. The subcomponent has a dual focus: institutional strengthening and policy support.

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52. Institutional Strengthening – The objective of this intervention is to augment the capacity of the institutions (public and private sector/community-based organisations) that will be responsible for overseeing and/or implementing the different Project activities. The activities planned for the first AWPB under this intervention:

- Institutional capacity gap assessment and production of a capacity development plan;
- Computer Support to National, Provincial and Municipal Staff for effective service delivery⁵⁹ (15 desktops);
- Motorcycles for Logistical Support to the Provincial and Municipal Extension Agents⁶⁰;
- Staff training for both PMU and IPA staff - IFAD Clinics⁶¹ -(a total 2 sessions);
- Motorcycle O&M⁶² (50 motorcycles);
- Motorcycle insurance (50 motorcycles).

53. Policy Support – The focus of this intervention will be to facilitate the development, review and update of policies and strategies in areas identified as critical for the effective and sustainable development of Angola’s inland fisheries. There are no activities planned under the policy arena for the first year.

54. Subcomponent 3.2: Project Management – This subcomponent will focus on putting process and procedures in place to ensure effectiveness in overall AFAP-2 management, planning and implementation, financial management and control, procurement, monitoring and evaluation, knowledge management, progress reporting, contracting and supervision of different service providers, etc. It will also ensure liaison and linkage with all other relevant projects/programmes being implemented in the country that seek to address similar or related constraints; this would be aimed at taking advantage of existent synergies and avoiding duplications. The following activities are planned:

- Double Cabin Vehicles (10)⁶³;
- Office Rehabilitation;
- Laptops for the PMU staff (15)⁶⁴;
- Desktops⁶⁵ (15 desktops);
- Printer/Photocopier (7)⁶⁶;
- Accounting software⁶⁷;
- Safe boxes (6)⁶⁸;
- Projectors (6)⁶⁹;
- Video Conference Equipment (6)⁷⁰;
- Server (1)⁷¹;
- Internet Network Equipment⁷²;

⁵⁹Desktop with software and antivirus; 3 per province and a total of 15 for the 5 provinces.

⁶⁰10 motorcycles per province/municipality (3 per province and 7 for the municipalities in each province) for a total of 50 motorcycles

⁶¹Trainer DSA; interpreter fee and lunch costs. 3-day training to be combined with implementation support missions

⁶²The unit cost is calculated as 10% of motorcycle cost price per motorcycle per year

⁶³5 are for the PMU and 5 are for the 5 provinces (one each).

⁶⁴1 Laptop for each PMU officer/specialist and 1 for each Provincial Coordinator. Laptop with software and antivirus.

⁶⁵Desktop with software and antivirus; 5 are for the PMU while the other 5 are for the five provinces (1 for each province)

⁶⁶5 of the printers are for the five provinces (1 for each province)

⁶⁷It includes accounting software package, annual licenses and technical assistance

⁶⁸5 of the Safes are for the five provinces (1 for each province)

⁶⁹5 of the Projectors are for the five provinces (1 for each province)

⁷⁰5 are for the five provinces (1 for each province)

⁷¹It includes: Server, software, uninterruptible power supply unit

⁷²5 of the packages are for the five provinces (1 for each province)

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- Office Furniture (15)⁷³
- Furniture for the Conference Room (1)⁷⁴;
- External audit (1);
- Internal audit (1);
- Start-up workshops (6)⁷⁵;
- Annual planning & review workshop;
- M&E Workshop with project stakeholders to validate the M&E Manual, data collection and reporting tools (1);
- Tablets for data collection by extension staff (15)⁷⁶;
- Installation of Information Systems (MIS)/Software (1);
- Maintenance of the MIS/ Software (1);
- COI Surveys (Baseline) (1);
- Mapping the existing and new aquaculture and inland infrastructure and setting up a dashboard (1);
- Support for the Knowledge management specialist (12 months);
- Project Manager (12 months);
- Finance Management Officer (12 months);
- Monitoring and Evaluation Officer (12 months);
- Procurement and Contracts Manager (12 months);
- Internal Auditor (6 months);
- Accountant (12 months);
- Procurement Assistant (12 months);
- Monitoring and Evaluation Assistant (12 months);
- Driver (12 months);
- Provincial Coordinator (60 months)⁷⁷;
- Province Office assistant (60 months);
- Provincial Driver (60 months);
- Operating costs
 - Office space (PMU)⁷⁸ – 12 months;
 - Office space (5 Provinces) – 60 months⁷⁹;
 - General operating expenses for PMU⁸⁰;
 - General operating expenses for Provinces;
 - Vehicle O & M;
 - Vehicle Insurance;
 - Field per diem.

V. BUDGET ESTIMATES AND FINANCING ARRANGEMENTS

5.1 Summary Budget and Funding

55. Presented in this section are summary tables giving an overall picture of financial resources required for the AFAP-2 2025 AWPB. The budget information is presented by component, financier and categories of expenditure. The total budget for AFAP-2's 2025

⁷³1 set for each officer/specialist. Each set consists of a desk, chair, lamp and a file cabinet

⁷⁴The set consists of a big table (sitting 12 people) and 20 chairs

⁷⁵1 at national level, and 5 at provincial level

⁷⁶Assuming 3 tablets/province

⁷⁷Provincial Coordinators will be getting a top-up to their government salaries

⁷⁸It includes: office space, security, all utilities and air-conditioning in the offices

⁷⁹It includes: office space, security, all utilities and air-conditioning in the offices

⁸⁰It includes: consumable goods, stationery material and communication charges (Internet, telephone and postage services)

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AWPB is about US\$ 4.07 million. A total of about US\$ 1.02 million (or 25% of the budget) is allocated to Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems; about US\$ 277,000 (or 6.8% of the budget) is allocated to Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development; and about US\$ 2.78 million (or 68.2% of the budget) is allocated to Component 3: Institutional Strengthening, Policy Support and Project Management. About 51% of the budget will be financed by the IFAD-12 PBSA; 16.8% will be financed by BRAM-12; 16.3% by the EU; and 16% will be from the Government. The following tables present the AFAP-2 AWPB costs by component, category and financier.

Table 3: First Year Annual Work Plan and Budget and Financing by Component (US\$ '000)

Angola												
Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2)												
Components by Financiers												
(US\$ '000)												
	IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
A. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems												
1. Sub-component 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem	424	47.8	78	8.8	282	31.8	34	3.9	68	7.6	887	21.8
2. Sub-component 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production	22	16.7	12	8.9	98	74.3	0	0.1	-	-	132	3.2
Subtotal	446	43.8	90	8.8	380	37.3	34	3.4	68	6.7	1,019	25.0
B. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development												
1. Sub-component 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries	42	23.6	39	21.8	98	54.5	0	-	-	-	179	4.4
2. Sub-component 2.2: Enhancing Market Access and Infrastructure Establishment	71	73.0	26	27.0	-	-	-	-	-	-	98	2.4
Subtotal	114	41.1	65	23.6	98	35.3	0	-	-	-	277	6.8
C. Component 3: Institutional Strengthening, Policy Support and Project Management												
1. Sub-component 3.1: Institutional Strengthening and Policy Support	179	67.4	-	-	50	18.6	37	14.0	-	-	266	6.5
2. Sub-component 3.2: Project Management	1,335	53.2	530	21.1	135	5.4	293	11.7	215	8.6	2,508	61.6
Subtotal	1,514	54.6	530	19.1	185	6.7	330	11.9	215	7.8	2,774	68.2
Total PROJECT COSTS	2,074	51.0	685	16.8	662	16.3	365	9.0	283	7.0	4,070	100.0

Table 4: First Year Annual Work Plan and Budget and Financing by Category (US\$ '000)

Angola												
Artisanal Fisheries and Aquaculture Project-Phase 2 (AFAP-2)												
Expenditure Accounts by Financiers												
(US\$ '000)												
	IFAD12 PBAS		IFAD12 BRAM		EU		GoA (in-cash)		GoA (in-kind)		Total	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
I. Investment Costs												
A. Works	64	62.8	24	23.2	-	-	14	14.0	-	-	102	2.5
B. Unallocated	-	-	-	-	-	-	-	-	-	-	-	-
C. Vehicles	75	23.9	51	16.1	-	-	189	60.0	-	-	315	7.8
D. Equipment, material, goods and services	337	71.7	67	14.3	-	-	66	14.0	-	-	470	11.5
E. Consultancies	614	55.2	217	19.5	282	25.3	0	-	-	-	1,113	27.4
F. Training and workshops	2	0.5	1	0.2	294	85.4	48	14.0	-	-	344	8.5
G. Grants and subsidies	-	-	-	-	-	-	-	-	-	-	-	-
H. Credit and guarantee funds	-	-	-	-	-	-	-	-	-	-	-	-
Total Investment Costs	1,092	46.6	359	15.3	575	24.6	317	13.5	-	-	2,344	57.6
II. Recurrent Costs												
A. Salaries and allowances	764	65.2	253	21.6	87	7.4	0	-	68	5.8	1,172	28.8
B. Operating Costs	218	39.4	73	13.1	-	-	47	8.6	215	38.9	554	13.6
Total Recurrent Costs	982	56.9	326	18.9	87	5.0	47	2.7	283	16.4	1,726	42.4
Total PROJECT COSTS	2,074	51.0	685	16.8	662	16.3	365	9.0	283	7.0	4,070	100.0

5.2 Detailed Budget by Components

56. Presented in this section are the detailed cost tables giving an overall picture of financial resources required for the 2025 AWPB and corresponding activities on which funds will be utilised.

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AFAP-2 2025 AWPB Detailed Budget by Components and Subcomponents

Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems

Subcomponent 1.1: Sustainable Inland Fisheries and Ecosystems

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Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development

Subcomponent 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries

	Unit	Quantities				Unit Cost (US\$)	Base Cost (US\$ '000)				Totals Including Contingen				Breakdown of Totals Incl. Cont. (US\$ '000)			
		Q1	Q2	Q3	Q4		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	For. Exch.	Local (Excl. Taxes)	Duties & Taxes	Total
I. Investment Costs																		
A. Establishment of 4P agreements																		
Technical support for structuring of 4P agreements	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaluation of 4P proposals and business plans	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Implementation of 4P agreements and business plans - Private sector	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal																		
B. Development of enterprises to operationalize smart kiosks																		
Technical support for development of business plans	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaluation of business plans	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Implementation of business plans - Private sector	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Implementation of business plans - Grant	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal																		
C. Identification of private anchor producers																		
Technical support for structuring of 4P agreements	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evaluation of 4P proposals and business plans	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Implementation of 4P agreements and business plans - Private sector	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal																		
D. Input subsidy to beneficiaries																		
Pond inputs for level 1 aquaculture farmers	Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crop inputs for level 1 farmers	Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pond inputs for level 2 aquaculture farmers	Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inputs for inland fisherfolk	Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inputs for cage farmers	Households	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal																		
E. Business development services																		
Training of producers groups and cooperatives	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training of SMEs operating smart kiosks and market traders	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Technical assistance to anchor producers	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support development of private sector investments	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal																		
F. Other technical assistance																		
Detailed value chain and market assessment	Study	0.25	0.25	0.25	0.25	80,000	20,000	20,000	20,000	0	81.40	20.35	20.35	20.35	24	57	-	81
Development of private sector engagement strategy	Study	-	-	-	-	-	-	-	-	-	-	0	0	-	-	-	-	-
Subtotal											81.40	20.35	20.35	20.35	24	57	-	81
G. Business development specialist	Months	3.00	3.00	3.00	3.00	8,000	2,000	2,000	2,000	0	97.68	24.42	24.42	24.42	29	68	-	98
Total Investment Costs											179	-	-	-	54	125	-	179
II. Recurrent Costs																		
A. Calls of proposals - operating costs																		
Establishment of PPPP Agreements - call of proposal	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development of Enterprises to Operationalize Smart Kiosks - call of proposal	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Identification of Private Anchor Producers - call of proposal	Lumpsum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Recurrent Costs																		
Total											179	-	-	-	54	125	-	179

Subcomponent 2.2: Enhancing Market Access and Infrastructure Establishment

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	Unit	Q1	Q2	Q3	Q4	Unit Cost (US\$)	Breakdown of Totals Incl. Cont. (US\$ '000)															
							Quantities				Base Cost (US\$ '000)				Totals Including Contingen				For. Exch.	Local (Excl. Taxes)	Duties & Taxes	Total
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
I. Investment Costs																						
A. Construction works																						
Last-mile roads /a	Km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
First landing point of sale facilities /b	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Water supply canal systems	Km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Hatcheries facilities (Kamibafu) /c	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Feed production facilities (Kamibafu) /d	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Hatcheries facilities (Masangano) /e	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Feed production facilities (Masangano) /f	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Smart markets /g	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Subtotal							-	-	-	-	-	-	-	-	-	-	-					
B. Equipment, material, goods and services																						
Smart kiosks	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Wheelbarrow	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Two-wheelers	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Three-wheelers	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Waste management for biogas and BSF (Smart Market @ Dondo)	Number	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Subtotal							-	-	-	-	-	-	-	-	-	-	-					
C. Technical assistance																						
Infrastructure specialist	Months	3	3	3	3	8,000	24	24	24	24	24	24	24	24	29	68	-	98				
Total							-	-	-	-	-	-	-	-	29	68	-	98				

/a It includes: construction, gravelling, grading, camber and drainage. It is inclusive of the roads for leading to Masangano and Kimanbafu hatchery and feed facilities
 /b It includes: sheds, running water, sanitation (VIPT), multi-functional areas, and micro-processing facilities
 /c For movable equipment that can be taken out at the end of the lease/ IFAD to help facilitate the funding access or provide business development service to support the development of the private sector investments
 /d For movable equipment that can be taken out at the end of the lease/ IFAD to help facilitate the funding access or provide business development service to support the development of the private sector investments
 /e For movable equipment that can be taken out at the end of the lease/ IFAD to help facilitate the funding access or provide business development service to support the development of the private sector investments
 /f For movable equipment that can be taken out at the end of the lease/ IFAD to help facilitate the funding access or provide business development service to support the development of the private sector investments
 /g Two markets will be built, in Dondo and Bengo

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Component 3: Institutional Strengthening, Policy Support and Project Management

Subcomponent 3.1: Institutional Strengthening and Policy Support

	Unit	Q1	Q2	Q3	Q4	Quantities	Unit Cost (US\$)	Breakdown of Totals Incl. Cont. (US\$ '000)								For. Exch.	Local (Excl. Taxes)	Duties & Taxes	Total
								Base Cost (US\$ '000)				Totals Including Contingent							
								Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
I. Investment Costs																			
A. Institutional Strengthening																			
Institutional capacity gap assessment and production of a capacity development plan	Study	0.25	0.25	0.25	0.25	✓	50,000	12.50	12.50	12.50	12.50	12.72	12.72	12.72	12.72	-	44	7	51
Build IPA capacity to coordinate and integrate inland fisheries and aquaculture extension /a	Session	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Capacity Strengthening of Government staff /b	Number of workshops	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Computer Support to National, Provincial and Municipal Staff for effective service delivery /c	Number	3.75	3.75	3.75	3.75	✓	2,000	7.50	7.50	7.50	7.50	7.63	7.63	7.63	7.63	15	11	4	31
Motorcycles for Logistical Support to the Provincial and Municipal Extension Agents /d	Number	12.50	12.50	12.50	12.50	✓	3,000	37.50	37.50	37.50	37.50	38.16	38.16	38.16	38.16	76	55	21	153
Implementation of other aspects of the capacity development plan	Study	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Staff training for both PMU and IPA staff - IFAD Clinics /e	Session	0.50	0.50	0.50	0.50	✓	3,340	1.67	1.67	1.67	1.67	1.70	1.70	1.70	1.70	-	6	1	7
BuildProc M1, M2 and M3 /f	Session	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		-	-	-	-			59.17	59.17	59.17	59.17	60.21	60.21	60.21	60.21	92	116	34	241
B. Policy support																			
Formulation of inland fisheries/aquaculture extension strategy	Lumpsum	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Development & adoption of a community-based fisheries production and management policy	Lumpsum	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Establishment of policy guidelines for standardizing fish feed quality	Lumpsum	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Establishment and promotion of policy instrument attractive financial incentives for the sector	Lumpsum	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Establishment and promotion of policy instrument to facilitate the establishment of 4Ps	Lumpsum	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Establishment and promotion of policy instrument to facilitate access to credit and investment capital for SMEs in the sector	Lumpsum	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
Total Investment Costs		-	-	-	-			59.17	59.17	59.17	59.17	60.21	60.21	60.21	60.21	92	116	34	241
II. Recurrent Costs																			
A. Operating costs																			
Motorcycle O&M /g	Number	12.50	12.50	12.50	12.50	✓	300	3.75	3.75	3.75	3.75	3.82	3.82	3.82	3.82	-	13	2	15
Motorcycle insurance	Number	12.50	12.50	12.50	12.50	✓	200	2.50	2.50	2.50	2.50	2.54	2.54	2.54	2.54	-	9	1	10
Total Recurrent Costs		-	-	-	-			-	-	-	-	-	-	-	-	-	22	4	25
Total		-	-	-	-			-	-	-	-	-	-	-	-	92	137	37	266

/a Specificities will be identified by the systems and capacity needs assessment.
 /b At National, Province and Municipality Levels in Social Inclusion, Climate and Nutrition Aspects
 /c Desktop with softwares and antivirus; 3 per province and a total of 15 for the 5 provinces
 /d 10 motorcycles per province/municipality (3 per province and 7 for the municipalities in each province) for a total of 50 motorcycles.
 /e Trainer DSA/interpreter fee and lunch costs. 3-day training to be combined with implementation support missions.
 /f Training is free but in the third year (M3) includes cost of travel and DSA for partial in-campus session
 /g The unit cost is calculated as 10% of motorcycle cost price per motorcycle per year

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VI. IMPLEMENTATION ARRANGEMENT

6.1 Overall coordination and Link to the Review and Approval Process

57. Project Year 2025, being AFAP-2's inaugural implementation period, many of the Project's activities during the first few months will mainly be preparatory in nature. The PMU will work to put processes, procedures and structures in place for effective AFAP-2's implementation. It is expected that after the inaugural implementation period, the rate of activity implementation will pick up fast.

58. As the PMU coordinates the different AFAP-2 activities, due regard will be given to the time needed for the different institutions (IFAD and GoA, and other co-financiers) to review and approve the different aspects of AFAP-2 implementation. This will be important to avoid implementation delays. This will be particularly important for the procurement function. The PMU will have to ensure that proper procedures with regard to prior review are adhered to. The time needed to accommodate the review and approval of the different procurements is incorporated in the Procurement Plan. The Project Implementation Manual (PIM) also provides guidance on all aspects of AFAP-2 implementation. The AFAP-2 Provincial Coordinators will have to ensure that all Project aspects related to the provincial, municipality and communes are well coordinated during the process of activity implementation; this should include planning, implementation, management, reporting, monitoring and evaluation.

59. In order to implement AFAP-2 activities effectively, areas which lack capacity will be addressed by providing the relevant capacity that is specific to the identified capacity gaps. Capacity building is the responsibility of AFAP-2's Subcomponent 3.1. Accordingly, capacity building programmes have been allowed for in the AWPB.

6.2 Progress Reporting

60. The PMU will aim at providing informative progress reports; this is a formal requirement stipulated in the Financing Agreement. The six-monthly and annual reports will be prepared and submitted to IFAD, the GoA and all collaborating institutions. The Provincial Coordinators will produce a consolidated report for all Project activities. The consolidated implementation progress report will be submitted to the oversight body (PSC) for review, comment and endorsement. The PMU would address any comments emanating from the oversight body before submitting the reports to IFAD. Efforts will be made to ensure a timely submission of the reports to IFAD. The progress reports will provide:

- a) a review of implementation progress compared to planned activities, and expenditures compared to budgets;
- b) details of problems encountered during the reporting period and any remedial actions taken to resolve the problems;
- c) an analysis of strength and weaknesses, opportunities and threats;
- d) a discussion of quantitative and qualitative progress made in achieving the overall objectives; and,
- e) the strategic direction for the next planning cycle.

61. In the process of producing progress reports, the PMU will reflect on outputs, evaluate performance, and identify weaknesses that can be improved and successes that can be up-

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scaled. It is hoped that this process would lead to better plans and implementation in the future.

6.3 Monitoring and Evaluation & Knowledge Management

62. Performance monitoring will be the primary responsibility of the Monitoring & Evaluation/Knowledge Management team at the PMU. The team will ensure that there are enough resources for all entities involved in implementing Programme activities. These will be assigned specific M&E duties, to enable them to play an active part in the participatory M&E process. Resources will be provided for the operational costs related to M&E activities. The essence of the M&E system is the ability to supply regular data, to monitor progress towards the achievement of set objectives and to detect emergence of unexpected developments and to draw those developments to the attention of management.

63. In situations where Project activities are to be implemented by qualified Service Providers, monitoring responsibilities may be formally agreed between the Service Providers as part of the agreements to be signed by the parties. Each of those Service Providers/Participating Institutions will be responsible for monitoring the activities they implement. Heads of the various institutions will take the lead role and responsibility for monitoring, especially in setting implementation milestones, collection of the necessary data, and reporting to the PMU. They will also take the lead role in interpreting outcomes of performance and impact M&E in terms of policy adaptations and requirements. To that end, the PMU will provide a clear common framework for planning and progress reporting, and to ensure that all parties have a clear understanding of the tools, formats, definition and applicability of indicators, and the means to conduct quality assurance. The PMU will be responsible for receiving and collating M&E data from the different institutions and producing consolidated progress reports. Results of M&E will be shared with other implementing partners during the M&E and national planning and review workshops. The focus will be to ensure a continuous process of feedback to stakeholders and management to enhance timely responses.

64. During the course of 2025, a baseline survey will be conducted to provide information about verifiable indicators as a benchmark for assessing impact of AFAP-2 interventions in line with the Project's goal, objectives and activities as contained in the logical framework. Such benchmarks will be developed as a reference point when organising repeat surveys and or when conducting Project Mid-term Review and end-of-Project evaluation.

65. It is planned that supervision/monitoring exercises will be jointly undertaken by IFAD and the GoA at least once every year.

66. With regard to Knowledge Management (KM), the focus of this first year AWPB will be on the preparation of AFAP-2's KM action plan whose objectives would be to: a) identify knowledge gaps and prioritization of knowledge products to be developed; b) systematically document methods to ease the up-scaling of best practices in Ethiopia or repackaging of innovative approaches developed elsewhere; c) disseminate knowledge using various communication tools. The dissemination will serve as an avenue for sharing relevant information among implementing partners and other stakeholders.

6.4 Procurement, Disbursements, Accounts and Finance Management

67. Financial management will involve budgeting, receipt of funds, procurement, making of payments, justification, generating withdrawal applications and reporting on all Project activities implemented. The PMU will establish a sound financial management system for the Project, consistent with the requirements of IFAD Guidelines on Financial Management

Angola: Artisanal Fisheries and Aquaculture Project – Phase 2 (AFAP-2) Consolidated Annual Work Plan and Budget 2025

covering the financial management cycle from Project start-up to financing closing including budgeting, accounting and financial reporting; establishing internal controls with internal audit arrangements; funds flow management including disbursements; and statutory audit throughout the Project cycle.

68. The authority to incur expenditure is the approval of the AWPB with expenditure incurred outside the approved AWPB declared ineligible for financing from the Project funds.

69. Regarding procurement, each contract to be financed by proceeds of IFAD's investment will be included in the Project Procurement Plan (PP) prepared by the PMU, approved by the PSC and receiving No Objection from IFAD. The PMU procurement unit will be in charge of, inter alia, procurement planning, handling of the bidding process, conducting bid openings and evaluations of bids, and contract monitoring. A Procurement Committee will be established at the PMU and would be expected to review and certify the following documents or actions: procurement plan, draft advertisements and bidding documents, evaluation reports and contract award recommendations, rejection of bids, contracts or contract amendments above pre-defined thresholds.

70. It should be noted that this being the inaugural year of AFAP-2 implementation, the Procurement Plan was prepared by a consultant. In the subsequent years, the Procurement Plan will be prepared from a consolidated list of goods and services for the different cost centres.

VII. EXPECTED BENEFITS AND BENEFICIARIES

71. The planned period (2025) being the inaugural year of a 7-year implementation period, the focus is expected to be on putting in place processes and procedures to help guide AFAP-2 implementation for the rest of the Project period. Therefore, it is assumed that the number of beneficiaries to be reached will be less than in subsequent years. This is consistent with AFAP-2's projected disbursement by semester which is expected to be low at the beginning of the Project and will increase in subsequent years.

72. With regard to benefits, AFAP-2 will promote climate sensitive lagoon management and market-led aquaculture technologies or practices and these are expected to increase productivity and enhance resilience. However, there will also be non-quantifiable benefits to accrue to different institutions and/or individuals and these will likely be immediate. The different scenarios are presented hereunder:

- a) There will be more capacity to coordinate and oversee effective Project implementation;
- b) Adoption of proposed interventions in the fishery and aquaculture sectors would have important financial and economic benefits in the form of better on-farm economic returns, households' livelihood, and reduced poverty of rural communities depending on fishery in the lagoons; and
- c) There are other non-tangible benefits, such as employment creation and an overall contribution to the stability/livelihood improvement of the target communities.

VIII. CONSTRAINTS, RISKS AND MITIGANTS

73. Presented in the below table are the possible constraints and risks that may hamper the implementation of the AFAP-2 2025 AWPB. The table also provides the suggested mitigation measures.

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Consolidated Annual Work Plan and Budget 2025**

Table 6: Possible Constraints and Risks and Suggested Mitigation Measures

Risk	Risk Mitigation Measures
1. Delay in procurement resulting in delay in implementation.	• Ensure the application/use of efficient procurement planning.
2. Delay in disbursement of funds resulting in delay in implementation.	• Follow proper financial management procedures and ensure submission of all supporting documentation when asking for replenishments.
3. Delayed receipt of No Objection from IFAD resulting in delay in implementation.	• Ensure proper planning that gives adequate time for receipt of requisite approvals.

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 Project Design Report

Annex 7: Procurement Plan for first 18 months

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

Procurement Plan SUMMARY

Country:	Angola			
Project Name:	AFAP 2			
Project ID:	xxxxxxx			
Version	1.0			
Version Date	27-Feb-24			
Prepared by:				
Approved by:				
Procurement Category	Plan		Actual	
Currency	USD	LCU	USD	LCU
Goods	7 388 000.00	-	-	-
Works	8 234 000.00	-	-	-
Consulting Services	1 897 500.00	-	-	-
Non-Consulting Services	-	-	-	-
Grants	-	-	-	-
TOTAL	17 519 500.00	-	-	-

The threshold tables below are based on the arrangements proposed in the PAL provisions

Prior Review Thresholds					
Category	Goods and goods-related Non-Consulting Services	Works and works-related Non-Consulting Services	Consulting Services and related Non-Consulting Services and/or MoU/Agreements	Individual Consultants	Decisions concerning Abnormally Low Bids shall be subject to the No Objection of IFAD:
Threshold	>= US\$ 50,000.00	>= US\$100,000.00	>= US\$ 30,000.00	>= US\$ 15,000.00	Only for procurement activities subject to prior review OR For all procurement activities

All Direct Contracting and Single-Source Procurements are **Prior Review** (in alignment with IFAD Procurement Handbook), or based on the thresholds stipulated in the LTB

The exchange rate at time of submission will be used for reviews.

Procurement Method Thresholds						
	CQS	LCS/FBS	QCBS	Shortlisting	SSS - Firms	SSS - Individuals
Consulting Services and related Non-Consulting Services	<= US\$ 50,000.00	< US\$ 80,000.00	>= US\$80,000.00	>= US\$80,000.00	<i>Subject to prior review and/or for contracts estimated to cost US\$ 200 or less and with a contract duration of three months or less and up to an aggregate amount of US\$ 2,000.00.</i>	<i>Subject to prior review and/or for contracts estimated to cost US\$ 200 or less and with a contract duration of three months or less and up to an aggregate amount of US\$ 2,000.00.</i>
	Direct Contracting	Shopping	NCB	ICB	Other Procurement Methods or Arrangements	
Goods and goods-related Non-Consulting Services	<i>Subject to prior review and/or for contracts estimated to cost US\$ 200 or less and with a contract duration of three months or less and up to an aggregate amount of US\$ 2,000.00.</i>	<= US\$70,000.00	< US\$ 150,000.00	>= US\$150,000.00	Force Account	Not Allowed
Works and works-related Non-Consulting Services	<i>Subject to prior review and/or for contracts estimated to cost US\$ 200 or less and with a contract duration of three months or less and up to an aggregate amount of US\$ 2,000.00.</i>	<= US\$ 175,000.00	< US\$ 500,000.00	>= US\$ 500,000.00	Community Participation	Allowed

Procurement Plan - WORKS

Angola

AFAP 2

Project ID: xxxxxxxx

Prepared by:

Approved by:

	USD	LCU	
Total Amount	8 234 000.00	0.00	Plan
	0.00	0.00	Actual
<i>Non-Consulting:</i>	<i>0.00</i>	<i>0.00</i>	<i>Plan</i>
	<i>0.00</i>	<i>0.00</i>	<i>Actual</i>

Version 1.0 27-Feb-24			Basic Data											Pre-Qual			
AWPB/Component Ref	No	Description	Non Consulting	Funding	Lot No/Description	Project Area or Procuring Entity	Plan vs. Actual	Pre- or Post Qualification	Prior or Post Review	Procurement Method	Envelopes	Amount (USD)	Amount (LCU)	Plan vs. Actual	Submission of PreQual Docs	No Objection Date	PreQual Invitation Date
C3.2.A2	1	Office Rehabilitation		IFAD			Plan	Post-Qual	Prior Review	NS	1	100 000.00		Plan	N/A	N/A	N/A
							Actual						-	-	Actual		
C2.2.A1		Construction of 200kms Last-mile roads		IFAD			Plan	Post-Qual	Prior Review	ICB	1	1 103 000.00		Plan	N/A	N/A	N/A
							Actual						-	-	Actual		
C1.2.A2		Construction of 3000 community-group ponds		IFAD			Plan	Post-Qual	Prior Review	ICB	1	6 618 000.00		Plan	N/A	N/A	N/A
							Actual						-	-	Actual		
C1.2.A3		Construction and installation of fish cages		IFAD			Plan	Post-Qual	Prior Review	NCB	1	303 000.00		Plan	N/A	N/A	N/A
							Actual						-	-	Actual		
C2.2.A3		Construction of water supply canal systems		IFAD			Plan	Post-Qual	Prior Review	NS	1	110 000.00		Plan	N/A	N/A	N/A
							Actual						-	-	Actual		

Procurement Plan - WORKS

Angola

AFAP 2

Project ID: xxxxxxx

Prepared by:

Approved by:

Version		1.0		27-Feb-24		Bidding Process				Bid Evaluation							
AWPB/Component Ref	№	Description	PreQual Closing Date	Submission of PreQual Report	No Objection Date	Submission of BD	No-objection Date	Bid Invitation Date	Bid Closing-Opening	Submission Tech Eval Rpt	No-objection Date	Submission Combined Eval Rpt*	No-objection Date	Plan vs. Actual	Issue of NOITA&Standstill	Date Contract Award	Submission of Draft Contract
C3.2.A2	1	Office Rehabilitation	N/A	N/A	N/A	15-Feb-25	22-Feb-25	23-Feb-25	9-Mar-25	N/A	N/A	16-Mar-25	23-Mar-25	Plan	N/A	29-Mar-25	3-Apr-25
															Actual		
C2.2.A1		Construction of 200kms Last-mile roads	N/A	N/A	N/A	15-Jan-26	22-Jan-26	24-Jan-26	10-Mar-26	N/A	N/A	31-Mar-26	7-Apr-26	Plan	10-Apr-26	25-Apr-26	30-Apr-26
															Actual		
C1.2.A2		Construction of 3000 community-group ponds	N/A	N/A	N/A	25-Jan-26	1-Feb-26	3-Feb-26	20-Mar-26	N/A	N/A	10-Apr-26	17-Apr-26	Plan	20-Apr-26	5-May-26	10-May-26
															Actual		
C1.2.A3		Construction and installation of fish cages	N/A	N/A	N/A	15-Apr-26	22-Apr-26	24-Apr-26	24-May-26	N/A	N/A	7-Jun-26	14-Jun-26	Plan	17-Jun-26	2-Jul-26	7-Jul-26
															Actual		
C2.2.A3		Construction of water supply canal systems	N/A	N/A	N/A	15-Apr-26	22-Apr-26	23-Apr-26	7-May-26	N/A	N/A	14-May-26	21-May-26	Plan	N/A	27-May-26	1-Jun-26
															Actual		

Procurement Plan - WORKS

Angola

AFAP 2

Project ID: xxxxxxx

Prepared by:

Approved by:

Procurement Methods

NS: National Shopping
 IS: International Shopping
 NCB: National Competitive Bidding
 ICB: International Competitive Bidding
 LIB: Limited (International) Bidding

Version			Contract Award & Signature							
1.0 27-Feb-24			No-objection Date	Date Contract Signature	Contract No.	Vendor Name/ID	Amount (USD)	Amount (LCU)	Date Contract Completion	Remarks
C3.2.A2	1	Office Rehabilitation	10-Apr-25	14-Apr-25			100 000.00	-		
C2.2.A1		Construction of 200kms Last-mile roads	7-May-26	11-May-26			1 103 000.00	-		
C1.2.A2		Construction of 3000 community-group ponds	17-May-26	21-May-26			6 618 000.00	-		
C1.2.A3		Construction and installation of fish cages	14-Jul-26	18-Jul-26			303 000.00	-		
C2.2.A3		Construction of water supply canal systems	8-Jun-26	12-Jun-26			110 000.00	-		

Procurement Plan - Consulting

Angola

AFAP 2

Project ID : xxxxxx

Prepared by:

Approved by:

Selection Methods
 QCBS: Quality and Cost-Based Selection
 QBS: Quality Based Selection
 CCB: Selection by Consultants' Qualifications (shortlist is required for this method)
 LCS: Least Cost Selection
 FBS: Fixed Budget Selection
 ICS: Technical Consultants' Selection (shortlist is required for this method)
 SSS: Sole Source Selection
 Selection (Design/Bid): Single Sourcing established in the project design or implementation manual

	USD	LCU	
Total	1 897 500.00	0.00	Plan
Amount	0.00	0.00	Actual
Non-Consulting	0.00	0.00	Plan
	0.00	0.00	Actual
Drinks	0.00	0.00	Plan
	0.00	0.00	Actual

Version	L.O.	27-Feb-24	Basic Data		ECI - Shortlist Procedure												Proposal Process												Evaluation												Contract Award & Signature											
			Grant	Non Consulting	Pending	Project Area or Procuring Entity	Plan vs. Actual	Shortlist (Yes/No)	Prior or Post Review	Procurement Method	Amount (USD)	Amount (LCU)	Plan vs. Actual	Submission of ECI	No Objection Date	ECI Submission Date	ECI Submission Deadline	Submission of Shortlist Report	No Objection Date	Submission of RFP/ICQ	No Objection Date	RFP/ICQ Launch Date	Proposal Submission Deadline	Submission of TBR	No Objection Date	Submission of ECR	No Objection Date	Plan vs. Actual	Issue of NQTA&Award	Date Contract Award	Negotiation Completed	Submission of Draft Contract	No Objection Date	Date Contract Signature	Contract No.	Vendor Name/ID	Amount (USD)	Amount (LCU)	Date Contract Completion	Remarks												
C1.1.A.1	1	1			IFAD	Plan	Yes	Prior Review	ICL	8,000.00		Actual	10-Aug-25	N/A	12-Aug-25	2-Sep-25	05-Sep-25	N/A	28-Sep-25	N/A	22-Sep-25	13-Oct-25	N/A	N/A	27-Oct-25	N/A	Plan	N/A	1-Nov-25	16-Nov-25	21-Nov-25	N/A	25-Nov-25			8,000.00																
C1.1.A.2	2	1			IFAD	Plan	Yes	Prior Review	ICL	63,000.00		Actual	23-Oct-25	30-Oct-25	1-Nov-25	22-Nov-25	6-Dec-25	13-Dec-25	17-Dec-25	24-Dec-25	29-Dec-25	16-Jan-26	N/A	N/A	30-Jan-26	6-Feb-26	Plan	N/A	12-Feb-26	26-Feb-26	3-Mar-26	10-Mar-26	14-Mar-26			63,000.00																
C1.1.A.3	3	1			IFAD	Plan	Yes	Prior Review	QCBS	63,000.00		Actual	1-Nov-25	8-Nov-25	10-Nov-25	24-Nov-25	8-Dec-25	15-Dec-25	19-Dec-25	26-Dec-25	28-Dec-25	13-Feb-26	25-Feb-26	4-Mar-26	18-Mar-26	25-Mar-26	Plan	28-Mar-26	12-Apr-26	27-Apr-26	2-May-26	9-May-26	13-May-26			63,000.00																
C1.1.A.4	4	1			IFAD	Plan	Yes	Prior Review	ECG	25,000.00		Actual	16-Jun-25	23-Jun-25	25-Jun-25	16-Jul-25	30-Jul-25	6-Aug-25	10-Aug-25	17-Aug-25	19-Aug-25	9-Sep-25	N/A	N/A	23-Sep-25	30-Sep-25	Plan	N/A	6-Oct-25	20-Oct-25	25-Oct-25	1-Nov-25	5-Nov-25			25,000.00																
C1.1.A.7	5	1			IFAD	Plan	Yes	Prior Review	ICL	8,000.00		Actual	25-Mar-25	N/A	27-Mar-25	17-Apr-25	1-May-25	N/A	5-May-25	N/A	7-May-25	28-May-25	N/A	N/A	11-Jun-25	N/A	Plan	N/A	17-Jun-25	3-Jul-25	6-Jul-25	N/A	10-Jul-25			8,000.00																
C1.1.A.2	6	1			IFAD	Plan	Yes	Prior Review	ICL	7,500.00		Actual	25-Jun-25	N/A	27-Jun-25	18-Jul-25	1-Aug-25	N/A	5-Aug-25	N/A	7-Aug-25	28-Aug-25	N/A	N/A	11-Sep-25	N/A	Plan	N/A	17-Sep-25	1-Oct-25	6-Oct-25	N/A	10-Oct-25			7,500.00																
C1.1.A.7	7	1			IFAD	Plan	No	Prior Review	ICL	40,000.00		Actual	5-Mar-26	N/A	N/A	N/A	N/A	N/A	5-Mar-25	12-Mar-25	14-Mar-25	8-Apr-25	22-Apr-25	29-Apr-25	13-May-25	20-May-25	Plan	23-May-25	7-Jun-25	22-Jun-25	27-Jun-25	4-Jul-25	8-Jul-25			40,000.00																
C2.1.A.1	8	1			IFAD	Plan	Yes	Prior Review	ICL	33,000.00		Actual	25-Apr-25	2-May-25	4-May-25	25-May-25	8-Jun-25	15-Jun-25	19-Jun-25	26-Jun-25	28-Jun-25	19-Jul-25	N/A	N/A	2-Aug-25	9-Aug-25	Plan	N/A	15-Aug-25	29-Aug-25	3-Sep-25	10-Sep-25	14-Sep-25			33,000.00																
C1.1.A.9	9	1			IFAD	Plan	Yes	Prior Review	ICL	11,000.00		Actual	30-Aug-25	N/A	1-Sep-25	22-Sep-25	6-Oct-25	N/A	10-Oct-25	N/A	13-Oct-25	2-Nov-25	N/A	N/A	16-Nov-25	N/A	Plan	N/A	22-Nov-25	6-Dec-25	11-Dec-25	N/A	15-Dec-25			11,000.00																
C1.1.A.11	10	1			IFAD	Plan	Yes	Prior Review	ICL	45,000.00		Actual	20-May-25	22-May-25	24-May-25	14-Jun-25	28-Jun-25	5-Jul-25	6-Jul-25	10-Jul-25	18-Jul-25	8-Aug-25	N/A	N/A	22-Aug-25	29-Aug-25	Plan	N/A	4-Sep-25	18-Sep-25	23-Sep-25	30-Sep-25	4-Oct-25			45,000.00																
C1.1.A.12	11	1			IFAD	Plan	Yes	Prior Review	ICL	37,000.00		Actual	15-May-25	22-May-25	24-May-25	15-Jun-25	29-Jun-25	5-Jul-25	6-Jul-25	10-Jul-25	18-Jul-25	8-Aug-25	N/A	N/A	22-Aug-25	29-Aug-25	Plan	N/A	7-Sep-25	23-Sep-25	28-Sep-25	4-Oct-25	6-Oct-25			37,000.00																
C1.1.A.18	12	1			IFAD	Plan	Yes	Prior Review	ICL	16,000.00		Actual	12-Jul-25	19-Jul-25	21-Jul-25	11-Aug-25	25-Aug-25	1-Sep-25	5-Sep-25	12-Sep-25	14-Sep-25	5-Oct-25	N/A	N/A	19-Oct-25	26-Oct-25	Plan	N/A	1-Nov-25	15-Nov-25	20-Nov-25	27-Nov-25	1-Dec-25			16,000.00																
C1.1.A.19	13	1			IFAD	Plan	Yes	Prior Review	ICL	6,000.00		Actual	10-Aug-25	N/A	13-Aug-25	5-Sep-25	21-Sep-25	N/A	25-Sep-25	N/A	27-Sep-25	18-Oct-25	N/A	N/A	5-Nov-25	N/A	Plan	N/A	7-Nov-25	23-Nov-25	28-Nov-25	N/A	30-Nov-25			6,000.00																
C2.1.A.14	14	1			IFAD	Plan	Yes	Prior Review	QCBS	61,000.00		Actual	30-May-25	17-May-25	18-May-25	3-Jun-25	18-Jun-25	25-Jun-25	27-Jun-25	4-Jul-25	6-Jul-25	20-Aug-25	5-Sep-25	10-Sep-25	24-Sep-25	1-Oct-25	Plan	N/A	4-Oct-25	19-Oct-25	3-Nov-25	8-Nov-25	15-Nov-25	19-Nov-25			61,000.00															
C2.1.A.15	15	1			IFAD	Plan	Yes	Prior Review	ECG	50,000.00		Actual	12-Jul-25	19-Jul-25	21-Jul-25	11-Aug-25	25-Aug-25	1-Sep-25	5-Sep-25	12-Sep-25	14-Sep-25	5-Oct-25	N/A	N/A	19-Oct-25	26-Oct-25	Plan	N/A	1-Nov-25	15-Nov-25	20-Nov-25	27-Nov-25	1-Dec-25			50,000.00																
C2.1.A.16	16	1			IFAD	Plan	Yes	Prior Review	ICL	96,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			96,000.00																
C2.1.A.17	17	1			IFAD	Plan	Yes	Prior Review	ICL	96,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			96,000.00																
C2.1.A.18	18	1			IFAD	Plan	Yes	Prior Review	ICL	96,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			96,000.00																
C2.1.A.19	19	1			IFAD	Plan	Yes	Prior Review	ICL	96,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			96,000.00																
C2.1.A.21	21	1			IFAD	Plan	Yes	Prior Review	ICL	120,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			120,000.00																
C2.1.A.23	23	1			IFAD	Plan	Yes	Prior Review	ICL	96,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			96,000.00																
C2.1.A.24	24	1			IFAD	Plan	Yes	Prior Review	ICL	96,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			96,000.00																
C2.1.A.19	25	1			IFAD	Plan	Yes	Prior Review	ICL	36,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	1-Jul-25	10-Jul-25	22-Jul-25	26-Jul-25	7-Aug-25	4-Aug-25	25-Aug-25	N/A	N/A	8-Sep-25	15-Sep-25	Plan	N/A	23-Sep-25	5-Oct-25	10-Oct-25	17-Oct-25	21-Oct-25			36,000.00																
C2.1.A.17	26	1			IFAD	Plan	Yes	Prior Review	ICL	96,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			96,000.00																
C2.1.A.27	27	1			IFAD	Plan	Yes	Prior Review	ICL	120,000.00		Actual	1-Jan-25	8-Jan-25	10-Jan-25	31-Jan-25	14-Feb-25	21-Feb-25	23-Feb-25	4-Mar-25	6-Mar-25	27-Mar-25	N/A	N/A	10-Apr-25	17-Apr-25	Plan	N/A	23-Apr-25	7-May-25	12-May-25	19-May-25	23-May-25			120,000.00																
C1.1.A.22	28	1			IFAD	Plan	Yes	Prior Review	ICL	27,000.00		Actual	5-Feb-26	10-Feb-26	12-Feb-26	5-Mar-26	19-Mar-26	26-Mar-26	30-Mar-26	6-Apr-26	8-Apr-26	29-Apr-26	N/A	N/A	13-May-26	20-May-26	Plan	N/A	26-May-26	9-Jun-26	14-Jun-26	21-Jun-26	25-Jun-26			27,000.00																
C2.1.A.29	29	1			IFAD	Plan	Yes	Prior Review	ECG	50,000.00		Actual	20-Mar-26	6-Apr-26	8-Apr-26	29-Apr-26	31-May-26	29-May-26	29-May-26	21-Jun-26	2-Jun-26	23-Jun-26	N/A	N/A	7-Jul-26	14-Jul-26	Plan	N/A	20-Jul-26	8-Aug-26	8-Aug-26	15-Aug-26	19-Aug-26			50,000.00																
C2.1.A.7	30	1			IFAD	Plan	Yes	Prior Review	ICL	13,000.00		Actual	18-Feb-26	24-Feb-26	27-Feb-26	20-Mar-26	3-Apr-26	10-Apr-26	14-Apr-26	21-Apr-26	13-Apr-26	14-May-26	N/A	N/A	28-May-26	4-Jun-26	Plan	N/A	10-Jun-26	24-Jun-26	29-Jun-26	6-Jul-26	10-Jul-26			13,000.00																
C1.1.A.11	31	1			IFAD	Plan	Yes	Prior Review	ICL	63,000.00		Actual	18-Feb-26	24-Feb-26	27-Feb-26	20-Mar-26	3-Apr-26	10-Apr-26	14-Apr-26	21-Apr-26	23-Apr-26	14-May-26	N/A	N/A	28-May-26	4-Jun-26	Plan	N/A	10-Jun-26	24-Jun-26	29-Jun-26	6-Jul-26	10-Jul-26			63,000.00																
C2.1.A.13	32	1			IFAD	Plan	Yes	Prior Review	ICL	63,000.00		Actual	15-Mar-26	22-Mar-26	24-Mar-26	14-Apr-26	28-Apr-26	3-May-26	9-May-26	16-May-26	18-May-26	8-Jun-26	N/A	N/A	22-Jun-26	29-Jun-26	Plan	N/A	5-Jul-26	19-Jul-26	24-Jul-26	31-Jul-26																				

Day Ranges *These tables provide estimated timelines by procurement methods, based on experience and guidance in the Procurement Handbook where specified.*

The approximate number of days are used in the default Procurement Plan Formulas. Timelines in the Approx fields/Formulas are not prescriptive, and may be modified by the project.

Approx figures entered will be highlighted/flagged, if below the Minimum number of days. Zero indicates steps that are not applicable to the method, and are indicated as N/A in the Formulas.

Goods & Works

Procurement Method	Submission of PreQual docs			No Objection Date			PreQual Invitation Date			PreQual Closing Date			Submission of PreQual Report			No Objection Date			Submission of BD			No-objection Date		
	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx
Single Envelope																								
RFQ/Shopping (NS/IS)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	N/A-Start Date	7	10	7
NCB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10	7
ICB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10	7
LIB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10	7
NCB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10	7
ICB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10	7
LIB (with PreQual)	1	4	N/A-Start Date	5	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10	7
Direct Contracting/ Force Account	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	N/A-Start Date	7	10	7

Two Envelope																								
NCB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10	7
ICB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10	7
LIB (no PreQual)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A-Start Date	7	10	7
NCB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10	7
ICB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10	7
LIB (with PreQual)	1	4	N/A-Start Date	7	10	7	1	3	2	14	30	30	14	21	14	7	10	7	1	14	10	7	10	7

Services

Selection Method	Submission of REOI			No Objection Date			REOI Launch Date			EOI Submission Deadline			Submission of Shortlist Report			No Objection Date			Submission of RFP/RCQ			No-objection Date		
	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx
QCBS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	14	14	21	14	7	10	7	1	7	4	7	10	7
FBS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	7	4	7	10	7
LCS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	7	4	7	10	7
QBS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	7	4	7	10	7
CQS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	5	4	7	10	7
ICS (w/Shortlist)	1	4	N/A- Start Date	7	10	7	1	3	2	14	30	21	14	21	14	7	10	7	1	5	4	7	10	7
QCBS (noShortlist)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A- Start Date	7	10	7
FBS (noShortlist)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	N/A- Start Date	7	10	7
LCS (noShortlist)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A- Start Date	7	10	7
QBS (noShortlist)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A- Start Date	7	10	7
SSS/ Selection (Design/PIM)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	N/A- Start Date	7	10	7

NOTE

1. Some procurement methods for low-value processes might require No Objections based on the Prior Review Thresholds. Where they do not require, No Objection number of days should be zero.
2. **RFP**: Request for Proposals: standard procurement document used for Services.
3. **RCQ**: Requests for Consultants Qualifications: Procurement document used for CQS and LCS. The RFP is used for all other procurement methods
4. Consulting services and Good/Works methods could either be used for Non-Consulting Services
5. All days are calendar days

Day Ranges

Goods & Works

Procurement Method	Bid Invitation Date			Bid Closing-Opening			Submission Tech Eval Rpt			No-objection Date			Submission Combined Eval Rpt/Bid Evaluation Report			No-objection Date			Issue of NOITA & Standstill			Date Contract Award		
	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx
Single Envelope																								
RFQ/Shopping (NS/IS)	1	3	1	5	21	14	0	0	0	0	0	0	1	7	7	7	10	7	0	0	0	4	-	6
NCB (no PreQual)	1	3	2	30	45	30	0	0	0	0	0	0	3	21	14	7	10	7	1	3	3	14	-	15
ICB (no PreQual)	1	3	2	45	70	45	0	0	0	0	0	0	3	21	21	7	10	7	1	3	3	14	-	15
LIB (no PreQual)	1	3	2	45	70	45	0	0	0	0	0	0	3	21	21	7	10	7	1	3	3	14	-	15
NCB (with PreQual)	1	3	2	30	45	30	0	0	0	0	0	0	7	21	14	7	10	7	1	3	3	14	-	15
ICB (with PreQual)	1	3	2	45	70	45	0	0	0	0	0	0	7	21	21	7	10	7	1	3	3	14	-	15
LIB (with PreQual)	1	3	2	45	70	45	0	0	0	0	0	0	7	21	21	7	10	7	1	3	3	14	-	15
Direct Contracting/ Force Account	1	3	1	7	30	14	0	0	0	0	0	0	3	21	7	7	10	7	0	0	0	4	-	6
Two Envelope																								
NCB (no PreQual)	1	3	2	30	45	30	3	21	3	7	10	7	3	14	14	7	10	7	1	3	3	14	-	15
ICB (no PreQual)	1	3	2	45	70	45	3	21	21	7	10	7	3	14	14	7	10	7	1	3	3	14	-	15
LIB (no PreQual)	1	3	2	45	70	45	3	21	21	7	10	7	3	14	14	7	10	7	1	3	3	14	-	15
NCB (with PreQual)	1	3	2	30	45	30	7	21	14	7	10	7	3	14	14	7	10	7	1	3	3	14	-	15
ICB (with PreQual)	1	2	2	45	70	45	7	21	21	7	10	7	3	14	14	7	10	7	1	3	3	14	-	15
LIB (with PreQual)	1	2	2	45	70	45	7	21	21	7	10	7	3	14	14	7	10	7	1	3	3	14	-	15

Services

Selection Method	RFP/RCQ Launch Date			Proposal submission deadline			Submission of TER			No-objection Date			Submission of CER			No-objection Date			Issue of NOITA & Standstill			Date Contract Award		
	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx
QCBS (w/Shortlist)	1	3	2	45	60	45	14	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	15
FBS (w/Shortlist)	1	3	2	45	60	45	14	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	15
LCS (w/Shortlist)	1	3	2	45	60	45	14	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	15
QBS (w/Shortlist)	1	3	2	21	60	45	14	21	14	7	10	7	0	0	0	0	0	0	1	3	3	14	-	15
CQS (w/Shortlist)	1	3	2	14	30	21	0	0	0	0	0	0	14	21	14	7	10	7	0	0	0	4	-	6
ICS (w/Shortlist)	1	3	2	14	30	21	0	0	0	0	0	0	14	21	14	7	10	7	0	0	0	4	-	6
QCBS (noShortlist)	1	3	2	45	60	45	14	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	15
FBS (noShortlist)	1	3	2	14	30	21	7	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	15
LCS (noShortlist)	1	3	2	21	30	25	7	21	14	7	10	7	7	14	14	7	10	7	1	3	3	14	-	15
QBS (noShortlist)	1	3	2	21	60	45	14	21	14	7	10	7	0	0	0	0	0	0	1	3	3	14	-	15
SSS/ Selection (Design/PIM)	1	3	2	7	30	30	0	0	0	0	0	0	7	21	14	7	10	7	0	0	0	4	-	6

Day Ranges

Goods & Works

Procurement Method	Submission of Draft Contract			No-objection Date			Date Contract Signature			Totals			
	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Approx Months/Days
Single Envelope													
RFQ/Shopping (NS/IS)	3	7	5	7	10	7	4	7	4	40	78	58	1m 27d
NCB (no PreQual)	3	7	5	7	10	7	4	7	4	78	123	94	3m 3d
ICB (no PreQual)	3	7	5	7	10	7	4	7	4	93	148	116	3m 25d
LIB (no PreQual)	3	7	5	7	10	7	4	7	4	93	148	116	3m 25d
NCB (with PreQual)	3	7	5	7	10	7	4	7	4	126	208	164	5m 12d
ICB (with PreQual)	3	7	5	7	10	7	4	7	4	141	233	186	6m 4d
LIB (with PreQual)	3	7	5	7	10	7	4	7	4	139	233	186	6m 4d
Direct Contracting/ Force Account	3	7	5	7	10	7	4	7	4	44	101	58	1m 27d
Two Envelope													
NCB (no PreQual)	3	7	5	7	10	7	4	7	4	88	147	104	3m 13d
ICB (no PreQual)	3	7	5	7	10	7	4	7	4	103	172	137	4m 16d
LIB (no PreQual)	3	7	5	7	10	7	4	7	4	103	172	137	4m 16d
NCB (with PreQual)	3	7	5	7	10	7	4	7	4	136	232	185	6m 3d
ICB (with PreQual)	3	7	5	7	10	7	4	7	4	151	256	207	6m 25d
LIB (with PreQual)	3	7	5	7	10	7	4	7	4	151	256	207	6m 25d

Services

Selection Method	Negotiations completed			Submission of Draft Contract and MoN Date			No-objection Date			Date Contract Signature			Totals			
	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Min	Max	Approx	Approx Months/Days
QCBS (w/Shortlist)	10	28	15	3	7	5	7	10	7	4	7	4	172	268	193	6m 11d
FBS (w/Shortlist)	10	28	15	3	7	5	7	10	7	4	7	4	172	268	200	6m 18d
LCS (w/Shortlist)	10	28	15	3	7	5	7	10	7	4	7	4	172	268	200	6m 18d
QBS (w/Shortlist)	10	28	15	3	7	5	7	10	7	4	7	4	134	244	179	5m 27d
CQS (w/Shortlist)	7	14	14	3	7	5	7	10	7	4	7	4	113	195	142	4m 21d
ICS (w/Shortlist)	7	14	14	3	7	5	7	10	7	4	7	4	113	195	142	4m 21d
QCBS (noShortlist)	10	28	15	3	7	5	7	10	7	4	7	4	128	190	145	4m 24d
FBS (noShortlist)	10	28	15	3	7	5	7	10	7	4	7	4	90	158	121	3m 30d
LCS (noShortlist)	10	28	15	3	7	5	7	10	7	4	7	4	97	160	125	4m 4d
QBS (noShortlist)	10	28	15	3	7	5	7	10	7	4	7	4	90	166	124	4m 3d
SSS/ Selection (Design/PIM)	7	21	21	3	7	5	7	10	7	4	7	4	55	126	103	3m 12d

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 Project Design Report

Annex 8: Project Implementation Manual (PIM)

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department



Investing in rural people

Republic of Angola

Artisanal Fisheries and Aquaculture Project- Phase 2 (AFAP-2)

PROJECT IMPLEMENTATION MANUAL (PIM)

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ABBREVIATIONS AND ACRONYMS

AFAP	Artisanal Fisheries and Aquaculture Programme
AfDB	African Development Bank
AOA	Angolan Kwanza
AWPB	Annual Work Plan and Budget
BIA	Beneficiary Impact Assessment
DSA	Daily Subsistence Allowance
EIRR	Economic Internal Rate of Return
ESMF	Environmental and Social Management Framework
EU	European Union
FAO	Food and Agriculture Organisation of the United Nations
FIFO	First in First Out
FM	Financial Management
FMD	IFAD’s Financial Management Division
FMFCL	Financial Management and Financial Control Arrangements Letter
GDP	Gross Domestic Product
GNI	Gross National Income
HDI	Human Development Index
ICP	IFAD Client Portal
IFAD	International Fund for Agricultural Development
IFR	Interim Financial Report
IPA	The Institute of Development of Artisanal Fisheries and Aquaculture
ISA	International Standards on Accounting
KAP	Knowledge, Attitude and Practices
KM	Knowledge Management
M&E	Monitoring and Evaluation
MINPERMAR	Ministry of Fisheries and Marine Resources
MoF	Ministry of Finance
MTR	Mid-Term Review
NGO	Non-Governmental Organisation
NPSC	National Project Steering Committee
NPV	Net Present Value
PCR	Project Completion Review
PDO	Project Development Objective
PDR	Project Design Report
PIM	Project Implementation Manual
PMU	Project Management Unit
PP	Procurement Plan
PPSC	Provincial Project Steering Committee
RBAs	Rome-Based Agencies
SDG	Sustainable Development Goal
SECAP	Social, Environmental and Climate Assessment Procedures
SO	Strategic Objective
TA	Technical Assistance
ToC	Theory of Change
USD	United States Dollar
WA	Withdrawal Application
WOP	Without Project
WP	With Project

PART I: FRAMEWORK AND RESPONSIBILITIES

I.1: DEFINITIONS

- 1. Aquaculture Field School (AFS) approach** – It is a methodology that ‘mimics’ the Farmer Field School (FFS) that was originally developed by the Food and Agriculture Organization (FAO) as a participatory approach for people-centred learning. Practical field exercises using direct observation, discussion and decision making encourage learning-by-doing and participants can exchange knowledge in a risk-free environment. Local knowledge and outside scientific insights are tested, validated and integrated directly in farmers’ ponds, under their localized ecosystems and socio-economic settings.
- 2. Food Insecurity** – It is the inability to obtain sufficient food (in terms of calories) and other essential goods and services to lead a healthy life.
- 3. Implementing Agencies (IA)** – It is the agency assigned the responsibility of implementation of the project. It leads the participatory process of preparing the Annual Work Plan and Budget (AWPB) and receives funding to support implementation of the approved activities.
- 4. Nutrition-related Knowledge, Attitude and Practices (KAP) survey** – It assess and explore peoples’ KAP relating to nutrition, diet, foods and closely related hygiene and health issues. KAP studies are mainly used to: a) collect key information during a situation analysis, feeding into the design of nutrition interventions; and b) to evaluate nutrition education interventions.
- 5. Project Implementation Manual (PIM)** – It is an annex to the Project Design Report (PDR). It provides practical guidance to Project implementers on key implementation aspects. It describes in detail how the Project components and activities outlined in the PDR are intended to be implemented. The PIM outlines the detailed mechanisms, processes and procedures, formats, eligibility criteria, etc. which will ensure efficient Project implementation and achievement of the envisaged results. The PIM is a living document and may be updated at any time, as needs arise, during implementation.
- 6. Time and Labour-Saving Technologies (TLST) and practices** – These are tools and equipment that reduce the drudgery and/or improve the efficiency of performing various farming, off-farm and household activities. These may include: a) the use of draught animals for land preparation, planting, weeding and rural transport; b) cooking on fuel efficient stoves; c) harvesting roof water for domestic purposes, agro processing and value addition, etc.
- 7. Community Council of Fishers (CCP)** – This is a co-management strategy, piloted by AFAP, that involves the establishment of a Council/Committee to spearhead local community participation, in partnership with the local Soba administration, IPA and other key stakeholders, in decision-making processes related to the sustainable management of fisheries resources.
- 8. Lagoon Management Plans (LMPs)** – These are plans that will be developed by the communities living around a given lagoon to facilitate the sustainable utilization, conservation, and safeguarding of that lagoon and its surrounding watersheds to enhance both local livelihoods and biodiversity conservation.
- 9. Smart Fish Kiosk (SFK) Initiative¹** – The SFK initiative seeks to revolutionize the retailing of fish and seafood by integrating renewable energy, sustainable infrastructure, and energy management technology. SFKs will serve as temperature-controlled infrastructures, reducing fish and seafood perishability in the developing world while promoting sustainable energy access, reducing food miles, and fostering social inclusion.

I.2: AFAP-2 OVERVIEW

¹Details about Smart Fish Kiosks are provide in the Technical Annex attached to this document.

10. AFAP-2 was jointly designed by GoA and IFAD. It is a follow-on Project to the Artisanal Fisheries and Aquaculture Project (AFAP)², implemented during the period 2015-2023. AFAP successfully demonstrated that small-scale inland fisheries can significantly contribute to better rural livelihoods through increased incomes and improved food and nutrition security. However, AFAP also established that there are still some aspects of the subsector that need to be addressed in order to make it a more competitive and sustainable conduit to improved rural livelihoods. Some of such challenges include: a) inadequate inland extension service provision; b) lack of appropriate infrastructure and equipment; c) a need for more effective market access arrangements; d) limited access to quality aquaculture inputs (seed and feed); e) limited availability of a skilled workforce and technical knowledge on aquaculture value chain; f) lack of a supportive policy environment to help guide and protect the growth of the subsector; etc. Accordingly, GoA has requested IFAD to liaise with its development partners and support an intervention to: a) scale-up AFAP's tested and proven technologies to other parts of the country to not only help improve income/reduce poverty, food and nutrition security but also reduce fish imports; and b) address the inland fisheries' challenges, as identified by AFAP, in order to provide a firm foundation for the sustainable growth and expansion of the subsector. In the process, GoA has put emphasis on the need to address the inherent technical, social, environmental and climate change-related aspects to make the interventions more effective and sustainable.

11. AFAP-2's goal is to 'contribute to improved household income, food and nutrition security through sustainable and climate resilient fisheries and aquaculture'. The Project Development Objective (PDO) is to 'contribute to the reduction of rural poverty and food insecurity of smallholders in the target provinces by developing their economic potential while improving natural resources management capacity and resilience to climate change'. The Project will be implemented over an eight-year period.

12. AFAP-2 will be implemented with particular emphasis on the following themes:

- *Climate Change and Environment* – Angola's climate is influenced by the cool sea currents especially along the coast and similarly by the altitudes in the plateau found in the interior part of the country. Rainfall decreases rapidly from North to South between the Atlantic coast and the countryside and from the Northwest to the Southeast. Therefore, the climate changes from "humid" to "semi-arid", in the south-east where the influence of the Kalahari Desert is well known. Rainfall variability from one year to the next is generally high with the southern part of Angola being frequently affected by extreme weather events, such as heat waves, droughts, floods and storms. Angola is experiencing rising temperatures, changing precipitation patterns and more frequent extreme weather events, such as droughts and floods. In addition, coastal areas are vulnerable to sea-level rise and associated risks, threatening coastal communities and infrastructure. In terms of impacts on the fisheries sector, rising sea levels and increased water temperatures are leading to changes in the coastal ecosystem, affecting the growth and survival of farmed species³. Also, extreme weather events, such as floods and cyclones, can cause severe damage to aquaculture facilities and infrastructure, leading to economic losses;
- *Gender* – There is widening gender inequality in Angola. Angola's overall Global Gender Gap score is 0.657, positioning it at 119 out of 153 countries, which is one of the highest in the world⁴. The HDI (2019) is 0.581, positioning Angola at 148 out of 189

²The original AFAP, implemented from 2015 to 2023, was restructured, at the MTR stage in 2018, to make it more effective; its focus was changed from being an investment project to piloting selected technologies. Thus, AFAP successfully tested the social, economic and technical viability of two technologies; smallholder aquaculture and fisheries co-management.

³Barbosa, R., Santos, J., & Silva, T. (2021). Climate Change Impacts on Aquaculture in the Benguela Current Ecosystem: Challenges and Opportunities. *Reviews in Aquaculture*, 13(3), 833-846.

⁴ World Economic Forum, 2022; Gender Gap report

countries⁵. Women constitute 51% of Angola’s population but they face underrepresentation in politics and in decision making bodies. Angola’s literacy rate is 71.1% (82% male, 60.7% female)⁶. Female participation in the labour market is 76.1% compared to 78.9% for men. Women in rural areas constitute 70% of the small-scale subsistence farmers and almost contribute all the labour. In Angola, 27% of women are less likely to be salaried workers compared to 40% of men. As for employed women, 81% are in vulnerable employment compared to 54% of men⁷. Several constraints exacerbate gender inequality: access to productive resources (inputs, finance, and knowledge), lack of access to education, market access, drudgery, drought, and low income and employment opportunities. Gender gaps in access to resources (such as agricultural production factors and employment and education) have long term impacts on family incomes and structural transformation. Men own the means of production (land, livestock and finance) and women provide most of the labour (for crop cultivation, conservation, processing, marketing of food crops and family nutrition security);

- *Youth* – These are defined as people aged 15 to 35 years⁸. The Angolan population is a youthful country. About 19% of the population are aged 15-24 years and 66% of the population are less than 25 years old. In the northern and central provinces of Bie, Bengo, Uige, Malanje and Cuanza Norte, 35% of the population are youth⁹. The youth face many challenges in areas of education, employment, access to productive resources (land and finance), lack of decision-making roles, lack of entrepreneurial skills and basic nutrition. A large number of youths migrate to urban areas, where some go to school and gain formal employment. Migration levels are highest for the age group 25 to 35 years. Youth unemployment is estimated to be 59.8 percent of the total unemployed. The 2021 total youth unemployment is 18.5% (18.2% males and 9.1%)¹⁰. The youth in rural areas are engaged in subsistence agriculture and are involved in family-based livelihood activities (handicraft, fishing and small shops). Youth have challenges to access finance and a low level of education;
- *Marginalised Groups* – The marginalised people consist of Persons Living With Disabilities (PLWD)s, ex-combatants, displaced and landless people. There are 658,258 PLWDs in Angola (365,547 urban and 290,710 rural)¹¹. The prevalence of disability is 2.5% with 56% male and 44% female. Of these, 56% reside in the rural areas. The most prevalent forms of disabilities include mental (10%), sensory (28%), and motor disability (62%). Disability is caused by the effects of four decades of civil war, deficiencies in health, limited access to prevention programmes, effects of diseases, low educational levels of families, the hidden attitude levels on disability, and high road accident rate. The long civil war has caused several physical and emotional stress resulting in human handicap. Since 2011, the Government has set up a law on social inclusion of handicapped children and the regulation on open spaces and walking places for handicapped persons. These handicapped persons are also organised into 18 federations and associations to represent their social categories and advocate for more support from the state and development partners;
- With regard to *Indigenous people (IP)*, there is limited information on the existence of IPs in Angola. GoA does not recognise the concept of IP and there is no reference to IPs in the Constitution. The marginalised ethnic groups in Angola include the San and Himba and other smaller groups (Kwisi, Kwepe, Kiwali and Zemba). The San and Himba are situated mainly in the southern provinces of Huila, Cuando Cubango and Moxico.

⁵ <https://hdr.undp.org/sites/default/files/Country-Profiles/AGO.pdf>

⁶ https://en.wikipedia.org/wiki/Education_in_Angola

⁷ World Economic Forum, 2022; Gender Gap report

⁸ Angola does not have an age definition; however, Angola is a signatory to the African Charter which defined youth as 15 to 35 years of age.

⁹ https://www.citypopulation.de/en/angola/admin/11__bi%C3%A9/AND_INES, 2014

¹⁰ World Bank <https://data.worldbank.org/indicator/SL.UEM.1524.ZS?locations=AO>

¹¹ INE 2014; General Census

The Kwila, the Kwele and Zemba speak the Herero language. The total population of the marginalised is estimated to be 25,000¹²;

- For *ex-combatants*, following the end of civil war that lasted from 1975 to 2002, close to 80,357 ex-combatants were demobilised in all the 18 provinces of Angola. In 1995, GoA created a Ministry in charge of Former Combatants and Motherland Veteran. In order to support the socio-economic integration of the ex-combatants, an Inter-Ministerial Commission for Coordination of socio-economic Reintegration of ex-combatants and homeland veterans (spanning across various ministerial departments). The objective of the Commission was to support these sensitive and fragile categories in the areas of health, finance, agriculture and social affairs; and
- *Nutrition* – Angola ranks 97 out of the 116 qualifying countries in the 2021 Global Hunger Index with a score of 26¹³; this implies that the country “suffers from a level of hunger that is serious”. Malnutrition remains a pervasive challenge, with UNICEF estimates of 3.9 million children with severe acute malnutrition admissions among 6 to 59 months old children in 2021. Angola has made no progress towards achieving the target for stunting, with 38% of children under 5 years of age affected; this is higher than the average for the Africa region (30.7%)¹⁴. The stunting rates remain very high in the AFAP-2 target provinces: Bie 51%, Bengo 40%, Malanje 32%, Cuanza Norte 45% and Uige 42%¹⁵. Undernourishment affected 17%, wasting 8.2%¹⁶, and overweight affected 3.4% (2015)¹⁷ of the children under 5 years in Angola. In addition, the prevalence of thinness (10.6% for boys and 5% for girls), overweight (16.9% girls and 8.7% boys) and obesity (3.8% girls and 2.4% boys) in children and adolescents (aged 5-19 years)¹⁸, show that the boys are thinner, less overweight and less obese than girls. The infant and child feeding practices are poor with 37.4% of infants aged 0 to 5 months being exclusively breast fed, and an estimated 14.5% of adult women and 5.2% of adult men living with obesity¹⁹ which features predominantly among urban dwellers.

13. The AFAP-2’s development objective will be achieved through the effective implementation of two technical component: a) Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems; and b) Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development. The third component, Institutional Strengthening, Policy Engagement Support and Project Management, will seek to ensure that AFAP-2 is effectively implemented, including the provision of capacity enhancement interventions. Capacity building activities will not only contribute to effective AFAP-2 implementation but will also increase the likelihood of sustaining successful Project interventions. Following hereunder is a summary of the expected focus of the different components.

14. Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems – The component will focus on expanding AFAP’s successful interventions and lessons in climate-resilient and nutrition-sensitive fisheries and aquaculture production strategies. AFAP achieved significant strides in inland fisheries co-management and community-based aquaculture production models²⁰. However, there is a need to refine the approach, emphasizing a shift towards business-oriented production to ensure long-term sustainability. The component will respond to Outcome 1 - *Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes*. This will involve the mobilization and capacity building of rural producers in targeted areas through enhanced access to technical and non-technical

¹²World Directory of Minorities and Indigenous People

¹³ <https://www.globalhungerindex.org/angola.html>

¹⁴Global Nutrition Report, 2022

¹⁵Angolan Demographic and Health Survey, 2015/2016

¹⁶<https://data.worldbank.org/indicator/SH.STA.WAST.ZS?locations=AO>

¹⁷<https://data.worldbank.org/indicator/SH.STA.OWGH.ZS?locations=AO>

¹⁸Global Nutrition Report (2021), Angola

¹⁹Ibid

²⁰AFAP PCR and AFAP PCN Reports

knowledge, skills, production assets and conducive policy environment for production and management of inland fisheries and small-scale aquaculture.

15. Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development – This Component will contribute to the achievement of *Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurs and infrastructure providing services*. It aims at supporting Component 1 with the necessary infrastructure, market linkages and entrepreneurial capacities to deliver quality fisheries and aquaculture inputs and products linking the source, producer, intermediaries and the consumer. The component will play a key facilitative and intermediary role both on the inputs and output markets. It is built around strengthening of linkages and networks among value chain actors. Interventions include identification of viable investments and support to selected Producer-Public-Private-Partnerships (PPPPs (4Ps)); development of essential value chain infrastructure (water supply systems for aquaculture, landing sites at lagoons, last-mile roads, first-point of sale input/output markets, sanitation facilities, intermediate markets, cold storage and processing facilities etc.); strengthening market linkages and promoting fisheries and aquaculture linked enterprises; business development services, especially to youth-operated enterprises along the value chain and financial linkages for the sustainable development of the sector. Focus will be placed on women, youth, the disabled and other vulnerable groups.

16. Component 3: Institutional Strengthening, Policy Support and Project Management – The objective of the component is to enhance the institutional capacity of community-based/farmer organisations and public entities providing services to target beneficiaries in the Project areas. It also seeks to facilitate the pathways for the Project's effective implementation and inclusive functioning of the inland fisheries sector, from production/capture to consumption.

I.3: TARGETING, GENDER, YOUTH AND PERSONS WITH DISABILITIES MAINSTREAMING

I.3.1: Targeting²¹

17. AFAP-2 will adopt a participatory, inclusive and flexible targeting strategy that is in line with the COSOP guidelines (2019-2024) and that empowers beneficiary communities in the targeting process. At a technical level, the focus will be on targeted interventions that help to build the resilience of beneficiary communities and their capacity to ensure inclusive and equitable governance in the management of the goods and services that will be made available or facilitated by the project. The project will build on lessons learned from past interventions and ongoing IFAD-financed projects in Angola and other countries in terms of social targeting and targeting of extremely vulnerable households.

18. Areas of Intervention – AFAD-2 will have a national scope and its activities will be implemented in rural, peri-urban²² areas in five provinces: Bengo, Bie, Cuanza Norte, Malanje and Uige. The choice of these provinces, in agreement with the Government, was based on a logic of scaling up the positive achievements of AFAP and combines several criteria, including: a) the geographic proximity to the AFAP provinces and relevance to the Project's double focus on fisheries co-management and aquaculture potential; b) the necessity to converge IFAD's interventions where they will have a significant impact on poor and vulnerable populations, particularly those most affected by food and nutrition insecurity. The project area boasts rich, diversified watersheds drained by major rivers such as the Zaire, Kwanza, Kuando and Kubango and their various tributaries as well as many others streams, and giving it significant water resource potential. The intervention area covers an area of about 260,600 km² (21% of the territory) and includes 6.05 million

²¹Additional information is contained in Annex 2: Targeting and Social Inclusion.

²² The more urbanized areas will be included in the market strategy but not in the production strategy in the light of the observations made on the ground: significant obstacles to the environment, hygiene and sanitation.

inhabitants²³ (i.e. 17% of the 35.58 million inhabitants estimated for 2022)²⁴ with 3.1 million women and nearly 2 million young people aged 15-34 representing 50.8% and 33% of the total population of the five provinces, respectively²⁵.

Table 1: Preliminary Identification of Potential AFAP-2 Concentration Areas and Demographic Characteristics

Region	Provinces	Population in 2022		Area (km ²)	Density (hbt/km ²) in 2022	Municipality potential concentration zone (pre-identified) ²⁶			
		Grand Total	Total Women			Name	Area (km ²)	Population in 2022	Density (hbt/km ²) in 2022
Central Region	BIÉ	1883100	980200	70800	26,60	Cuito	4750	583479	122,8
						Catabole	2857	163836	57,35
						Camacupa	9087	200449	22,06
						Andulo	10100	334052	33,07
Northern Region	The UIGE	1867157	946562	62500	29,87	Nhareia	6972	163517	23,45
						Uige	1188	653640	550,2
						Negation	2031	173162	85,26
						Bungo	2351	46774	19,90
	CUAN ZA NORTE	554749	280269	20500	27,06	Puri	1241	47726	38,46
						Sanza Pombo	4850	86094	17,75
						Cambambe	5232	113596	21,71
						Lucala	28370	28370	16,48
						Ambaca	3088	77259	25,02
	MALA NGE	1247500	635493	86500	1442	Banga	1280	12960	10,13
						Cacuso	6063	90421	14,91
						The Cangandala	5770	57072	9,891
						Calandula	7312	101703	13,91
	BENG O	497721	248223	20300	24,52	Luquembe	10300	69402	6,738
						Caculama (Mucari)	2119	38088	1797
						Dande	7216	310557	43,04
						Le Nambuanguongo	5650	84960	15,04
Total five provinces		6050227	3090747	260600					
Total general		35588987		1252145	1 246700				
%		17,00%		21					

Sources: Population and area data from INE (Instituto Nacional de Estatística), 2023

19. Targeting Logic – To maximize its impact on the rural poor and increase the opportunities for the socio-economic inclusion of vulnerable fishing communities and small-scale fish farmers, young people and women, pool certain costs and facilitate the learning and adoption of the innovations to be promoted, AFAP-2 will use a two-pronged approach: "area of concentration" and geographical phasing (gradual coverage of production basins in municipalities with high pre-identified potential in the five provinces). The project will begin in localities with inland artisanal fisheries and high aquaculture potential. Priority will be given to identifying the aquaculture basin areas most affected by poverty and food and nutritional insecurity, but in which: a- there is some dynamic development of fishing or aquaculture activity (even on a small scale) and b- where there is already a potential supply and demand for aquaculture services or support for the marketing of fisheries products. This approach will make it possible to generate the necessary emulation to generate demand from other fishing communities, young people and women and enable the project to be able to gradually extend by knock-on effect to the rest of the localities with strong aquaculture potential, but little developed in the five intervention provinces selected.

20. Guiding principle for the identification of areas of concentration – The areas of concentration will be targeted by combining the basin/territory of production approach and the sector/value chain approach²⁷. Two-tier targeting strategy will be used: (i) the

²³Demographic projection from the National Institute of Statistics (INE, 2022), <https://www.ine.gov.ao/>. According to the results of the 2014 population census, this population is 4.72 million inhabitants in the project area, which is 18% of the 25.8 million inhabitants of the country (INE, 2014).

²⁴ World Bank, 2023, World Perspective,

²⁵including about 17 million women (51% of the general population) and 11.6 million young people aged 15-34; i.e. 32.7% of the total population. (United Nations, Department of Economic and Social Affairs, Population Division; World Population Prospects: The 2022 Revision)

²⁶ Pre-identification done by IPA

²⁷ In the context of AFAP2, the basin is considered as a territory where there is the greatest potential for the development of aquaculture value chains and related trades, and where spillover effects are sought between emerging economic entities/enterprises in aquaculture (as observed during the formulation mission in the field) and which already have functional relationships (or may possibly have relationships with small-scale producers in the development of their production, processing or marketing of aquaculture or fishery products)

"Municipality of Concentration" and (ii) the "Production Basin"²⁸ localities. The production basins are villages or (village clusters) and intervention level 1 where activities will be carried out directly towards the beneficiaries, while the Municipalities are the second intervention level and the administrative planning unit of the activities. Municipalities are very with a wide dispersion of localities production basins. To do this, after the identification of "production basins", the project will select certain municipalities that group together the largest number of "production basins" to serve as an operational anchor unit in order to facilitate the monitoring of the implementation of the project.

21. Selection of Municipalities and Project Focal Areas – During the design mission, 21 potential municipalities²⁹ "concentration zone" were pre-identified among the 55 municipalities that make up the five provinces of intervention. This pre-selection was made with the support of IPA and on the basis of their potential for the development of aquaculture and small-scale fishing. As soon as the project starts, the pre-identified municipalities will be confirmed by the project team, IPA and the local authorities concerned. This selection/confirmation will take into account (i) socio-economic, climatic and economic vulnerability criteria affecting production systems and the resilience of low-income rural populations in the area, (ii) trade dynamics or favourable market potential for the creation or development of aquaculture activities, (iii) investment priorities in the provinces and municipalities concerned (iv) opportunities for synergies with other partners and possibilities for scaling up development approaches and solutions based on lessons learned and capitalized knowledge (in the implementation of the first phase of AFAP); (v) Opportunities to scale development approaches and solutions based on lessons learned, experiences. The selection/confirmation approach is as follows: (i) select the municipalities hosting the largest aquaculture production basins; (ii) prioritize those containing "sub-basin" localities marked by a- a high incidence of poverty in all its dimensions, food and nutrition insecurity, and high youth unemployment and presenting the best options for the development of resilient and profitable aquaculture. '

22. Selection of Anchor Communes – Given the dynamics of land use in Angola³⁰, the project will identify a limited number of "anchor communes" within the selected municipalities. The definition of these anchor areas will be based on the numerical importance of the "fisheries production basin" localities and favourable to the project's interventions. Their targeting will also take into account (i) the geographical proximity of the main roads and the operability of the infrastructure facilitating marketing (tracks, fish marketing areas, markets, etc.), (ii) the possibilities for optimising the impact of the project, the complementarity and synergy of the approaches and intervention methods developed by other technical and financial partners operating in the same areas, on the same target groups or in complementary or similar areas.

23. Selection of Basins of Production – The targeting of localities, basins/sub-basins of fish production will refer primarily to the poverty profile and the mapping of vulnerability in these areas of preaching or aquaculture. The selection will take into account two major categories³¹ of criteria: (i) technical criteria (e.g. aquaculture production potential/availability of suitable sites for the project's structuring investments and the development of aquaculture activities, etc.) and (ii) criteria related to the state of structuring infrastructure, market access opportunities, the economic situation of women and youth, the nutrition issue based on the mapping of the country's nutritional situation

²⁸ Within the framework of the AFAP-2 project, the basin is the place where an entrepreneurial dynamic can be easily built in the two sub-sectors (aquaculture and small-scale continental fisheries). As such, the basin is the territory where there is the best potential for the development of aquaculture production and related trades. This territory has and offers (i) a set of favorable conditions (market facilities, financial services, training/incubation centers to facilitate the entry of young people, support and advice, etc.) for the establishment and development of profitable aquaculture activities. The basin approach facilitates learning and adoption of the innovations to be promoted, as well as opportunities for pooling the benefits offered by provinces and other local authorities as a decentralized entity with the transferred competences on which the project will be based in its implementation.

²⁹ The 21 municipalities with high potential for aquaculture and small-scale inland fisheries were pre-identified (i.e. a potential coverage rate of 38.2%). Its municipalities are among the most populous, with an average density of 24.49 inhabitants/km² (compared to a density of 28.42 inhabitants/ km² at the national level).

³⁰ The population density is generally very low and the fishing localities within the same municipality are sometimes very far from each other, with a high level of isolation from certain fishing areas.

³¹ It is a question of taking into account the specific criteria for the development of a sustainable aquaculture activity

(see Table 1). The localities "production basin" to be selected will be concentrated in a geographical area within a radius (30-50 km) of the centre of the basin. The aim of the approach is to avoid dispersal and to facilitate the pooling of certain costs (for example, the costs associated with the supply of inputs and those of advisory support, etc.)³².

24. The characterization study of the fish production basins is the starting point for targeting the localities of concentration and the value chains to be supported in each area. Particular attention will be paid to small-scale inland fishing localities that are becoming increasingly fragile with a view to using aquaculture as a practice of business sustainability³³ and resilience of poor fishing households³⁴ in these localities. The targeting will be refined at the start of the project and in particular for the confirmation of the municipalities of intervention and the delimitation of the operational anchorage areas and fish production basin (communes/villages).

Table 2: Geographic-targeting criteria

Detailed criteria for geographic targeting of localities, basins or sub-basins within areas of concentration	
1.	Level of poverty and vulnerability to food insecurity, including prevalence of chronic malnutrition
2.	Demographic weight of the rural population, in particular unemployed or underemployed young workers,
3.	Importance of the aquaculture or fishing activity (traditional fishing basin, area with high aquaculture potential and/or with a dynamic evolution of the production, processing or marketing activity of fish products or existence of a dynamic intensification of fish production in general)
4.	Production level of family farms and micro, small and medium-sized enterprises or fish farmers' organizations in the area -Level of vulnerability of fisheries production systems or environmental fragility of the area
5.	Existence in the vicinity of a fish market, food market, or proximity to major consumption centers Accessibility of the area to markets for the consolidation and/or distribution of fish farming products
6.	Dynamics of processing or marketing of fish products in the area (processing unit or fishery products in general)
7.	Organizational dynamics, even nascent, around small-scale fisheries (existence of community and/or producer organizations, cooperative societies for the development of aquaculture products, etc.)
8.	Importance and acuteness of the needs in terms of infrastructure to support production, valorization and marketing or access to production areas

25. For the economic initiatives to be supported in the aquaculture sector, the targeting will also take into account market opportunities (proximity to buyers, possibilities of existing or future productive and/or commercial partnerships and opportunities for cooperation, existence or possibility of a potential demand for support, etc.) and the ambition of the project to densify investments in poor areas in order to generate a geographical impact at the level of the department of concentration and beyond. In addition to the defined criteria, the specific aspects of the expected results of the implementation of each component of the project will be integrated into the targeting process. The selection of production basins and intervention sites, mainly for structuring investments (SMART Markets, kiosks and other points of sale) will be done in a participatory manner with the implementing actors and the beneficiaries (local authorities, actors in the sector, staff of technical support structures, etc.).

Technical and Socio-Economic Targeting Strategy

26. Technical and sector targeting. At a technical level, the economic model to be promoted by the project is based on the market as the starting-point for structuring production and adapting the capacities of producers likely to meet the demand of the commercial outlets to be identified. To this purpose, the project will study the market potential and propose an intervention approach that (i) identify the main market sources, including private sector actors interested in aquaculture products; (ii) facilitate links between fish farmers and market operators; (iii) regulate supply and demand by

³² The aim is to encourage learning between project beneficiaries through geographical proximity and to promote the gradual assumption of the costs of advisory support by the fishing communities or aquaculture enterprises supported.

³³ Aquaculture production could in this case contribute to ending or reducing fishing activities in fragile areas to avoid or reduce the depletion of fish stocks in their natural state and thus contribute to the recovery of aquatic resources.

³⁴ Rural fishing households (especially those engaged in small-scale fishing) are among the households with a very high level of poverty. The aquaculture activity presents itself as an alternative and a good opportunity to improve their income and strengthen their resilience in the face of the scarcity of fish products in certain traditional fishing areas (visited during the formulation mission).

mitigating post-harvest losses. Any economic initiative in the aquaculture or small-scale fisheries value chain is eligible for project support, provided that (i) the development of the initiative generates income for the initiative holder and can create decent jobs for many small-scale fish farmers, young people and poor women; (ii) there is actual or potential demand and opportunities to create or strengthen small-scale producers' access to quality goods and services and remunerative markets.

27. The eligibility of an activity to be supported meets the following objectives: (i) promotion of a profitable activity in the aquaculture sector, market-oriented and meeting the requirements of quality, quantity, price and frequency of their supply, (ii) environmentally friendly, (iii) accessible to young people and women and (iv) and able to contribute to strengthening the food and nutritional security of the targeted populations.

28. AFAP-2 will create the conditions for a significant improvement in fish production to achieve the set production targets and to improve the profitability of the production units that contribute to them. At the production level, in order to achieve the objectives, set for productivity, production and added value, AFAP-2 will promote intensive production units and the specialization of producers so as not to disperse their investments. The project will develop essentially intensive production systems. Aquaculture production will be supported by individual and collective entrepreneurial initiatives. These initiatives will also include the provision of genetic material, advisory services, equipment and other services, as well as the promotion of integrated aquaculture. Downstream, AFAP-2 will promote a series of initiatives of similar format including processing units, food distribution networks, marketing kiosks, etc. The eligibility³⁵ of a site for the establishment of a production and/or marketing infrastructure is subject to a feasibility and sizing study prior to financing. The initiatives to be promoted are summarized in the table below:

Table 3: Some Entrepreneurial Opportunities and Market Typology³⁶

1. Individual or collective initiatives to be supported by the project³⁷
• Processing Unit: Smoking, Drying
• Product Marketing Kiosks (Fresh & Processed)
• Independent points of sale
• Feed Production Unit
• Supply of production equipment and tools
• Support, advice and follow-up of aquaculture farms
• Maintenance
• Aquaculture intensive
• Integrated Aquaculture
• Supply of equipment
• Hatcheries
2. Operating Models/Sole or Collective Business
• Start-up initiative
• Growing Initiative
• Income-generating activity (fisheries or aquaculture)
3. Partnership Models
• Inclusive productive and/or business partnerships

29. **Socio-Economic Targeting** – Socio-economic targeting is mainly based on the criteria of an inclusive approach. In the case of small-scale inland fishing, this will be an approach to support the development of community-based economic initiatives (income-generating activity carried out by fishermen's groups, associations or cooperatives). On the other hand, for aquaculture, the project will support both individual and collective initiatives with an entrepreneurial objective. The targeting approach to be adopted will highlight the entrepreneurial dynamic which consists of tracing the trajectory followed by a person or a group of people moving from an idea for a business project to the creation or development of a viable business as well as from an apprentice entrepreneur to a confirmed entrepreneur with a certain level of entrepreneurial culture, management (autonomy in supply, in the conduct of the activity, good financial education, autonomy in access to markets, etc.).

³⁵ It will not be a question of financing or creating everything in each selected locality. The approach to targeting the economic initiatives presented by the potential beneficiaries to be funded must remain systemic and differentiated according to (i) the needs of the distribution markets in the community, (ii) the entrepreneurial dynamics of the promoter(s) (iii) the size of the support requests to be met, (iv) the structuring needs identified in the value chain, (v) the profile of the different categories of actors carrying out the requests for support and their specific aspirations

³⁶ Opportunities for aquaculture business creation and development and market structuring are discussed in the section on Component 1 et 2

³⁷ Indicative list based on the observations and analyses of the formulation mission. Likely to be completed upon implementation

This dynamic is accompanied by the emergence of trades/jobs in the production/supply of goods and services that this person or group of people needs to achieve their objectives (generation/supply of a good or service).

30. Orientation for Targeting Support – Support will therefore be differentiated for promoters who are "start-ups" of an activity or even who need to manage an income-generating activity as the first step of an entrepreneurial approach, and for more experienced and already established promoters whose need is to consolidate and develop their initiative. The inclusive approach aims to promote the emergence and support of initiatives by target groups that encounter major obstacles in the entrepreneurial dynamic, and in particular young people and women. In view of the context and to promote the interest of promoters, mainly first-time aquaculture entrepreneurs, women and young people mainly, the project will develop a socio-economic targeting approach focused on supporting the development of an accessible, attractive and less painful aquaculture sector.

31. AFAP-2 will support the evolution of three types of economic initiatives in the field of aquaculture or small-scale inland fisheries:

- The promotion of micro-initiatives in aquaculture or fisheries conducive to the economic empowerment of women and the youngest, vulnerable groups. In this case, these are income-generating activities in aquaculture (developed at the group level or managed at the family level) for self-consumption and income generation (through the sale of surpluses), it can be the first step of a more substantial professional project for vulnerable households in both sector
- The consolidation and transformation of an existing aquaculture activity so that it can orient itself towards the market and free up the means for its development,
- The emergence of new initiatives oriented from the outset towards a perspective of specialization and profitability and which will generate potential for evolution,

32. Targeting economic initiative holders (mainly young people) is facilitated by their physical relationship with the area in which they live, carry out their activities and/or register their income-generating activity or business project. This approach will make it easier for young people to settle in their place of residence, and will promote women's entrepreneurship by grouping goods and services together in the intervention areas to make it easier for women in particular to access them.

I.3.2: Target Group and Targeting Approach

33. Target Group and Characteristics – AFAP-2 target group includes individual fish farmers (or aquaculture promoters), cooperatives or groups, small family farms, rural households including those headed by women, active rural women and youth or with diversified potential for economic and professional integration in aquaculture linkages. The project will focus in particular on rural communities that are economically and socially vulnerable, such as artisanal fishermen who are food and nutrition insecure, people with disabilities, Ex-combatants and other disadvantaged groups, people affected by climate change and/or people living with HIV/AIDS, etc. Priority will be given to entrepreneurial initiatives led by (i) low-income aquaculturists; (ii) ³⁸underemployed or unemployed rural youth (men and women) from poor households, to improve their assets and capacities necessary to carry out a business project, (iii) women, mainly those who are heads of households or heads of holdings and come from poor households. They will benefit from a combination of training support, business project support and facilitation in access to inputs, markets and financial services. The project will also support, through productive or commercial partnerships, private aquaculture economic operators whose business models include small-scale producers and promote their access to the market.

34. In the five provinces selected, AFAP-2 plans to directly target 31,000 vulnerable, poor and disadvantaged rural households engaged or willing to engage in artisanal fisheries and aquaculture. This corresponds to 148,000 household members. For all field activities, 40% of target households will be female-headed, 30% will be youth-headed, while the disabled and other vulnerable groups will account for 5%. Based on the observations made, the

³⁸ They are often inclined to leave the countryside in search of a better economic and social situation. Among them are young fishermen affected by climate change and in retraining.

constraints of the potential beneficiaries encountered on the field and the exchanges with the local actors met by the mission, the target group of AFAP II can be classified into three categories, C.1, C.2 and C.3, as indicated in the following table.

Table 4: Characteristics of Beneficiaries and Support Pathways

Beneficiary Categories and Characteristics	Support Pathway	Targets
<p>Category 1 (C1): Highly vulnerable poor households. These are mainly (1) small-scale fishing communities made up of households living in very high food and nutritional insecurity, using very rudimentary tools for their agricultural and/or fishing activities and deriving very few resources from these activities (less than 20000 kz/month); (2) economically and socially vulnerable rural people, who are less visible and less represented in productive segments (such as people with disabilities, people living with HIV/AIDS, young mothers, young migrants seeking socio-economic reintegration in host environments); (3) households headed by widowed women, single women, the elderly (with very little labor force), extremely vulnerable multi-faceted households, ex-combatant households, etc.</p> <p>These targets share in common structural vulnerability, low social inclusion and a lack of socio-economic opportunities.</p>	<p>Gradual path (two cycles of support for aquaculture). Support and integration in a gradual pathway combining targeted nutritional support (through the "nutri-pond" integrated with home gardening activities) and a smart subsidy mechanism for the development of an IGA in one of the links of the aquaculture value chains (component 1). These investments in income generating activities (IGAs) and nutritional support are designed to avoid creating attitudes of dependency in this target group, but rather to accompany the beneficiaries to get out of their precarious situation through this process of graduation support focused on their own needs and aspirations.</p>	10,300
<p>Category 2 (C2): represents poor households in transition. This category consists of: (i) fish farmers organised in cooperatives or sub-groups that are members of the Community Council of Fishers (CCPs) already in place and whose activity is more oriented towards some improvement of livelihoods; (ii) individual or independent fish farmers, whether or not organised as a common interest group (GIC) engaged in aquaculture with a certain mastery of the conduct of the activity, with a small aquaculture farm³⁹, (iii) smallholder family farmers with economic activities that mainly meet subsistence needs (including women farm managers);</p> <p>This group can include active rural women and young people⁴⁰ engaged in fast-cycling and fast-income and/or seasonal activities or with a diversified potential for their economic and professional integration in the aquaculture links or young men and women (15-35 years old) wishing to be trained in related occupations/support for the development of aquaculture value chains.</p> <p>These rural or peri-urban households are characterized by a low level of income. They are less connected to markets, with very limited access to technology and no access to finance (for the most part). They engage in aquaculture activity in addition to an Income Generating Agricultural (IGA) activity mainly to generate a source of personal subsistence income. They do not create – and do not aspire to create – job opportunities for people outside their immediate family circle.</p>	<p>Sustainable intensification (One Cycle of Support). Sustainable intensification (One Cycle of Support). The project will support beneficiaries in these categories by implementing a support package to strengthen their activities, professionalise them, enabling these target groups to access credit to develop and/or strengthen their activities and be part of a growth path through the knowledge and promotion of innovations and formation on technical itineraries to increase market-oriented productivity, diversify income and improve labor productivity.</p>	25,000
<p>Category C.3 brings together local actors qualified as micro, small or medium-sized aquaculture entrepreneurs, most of whom are formal or part of a process to formalize their economic initiative in this field.</p> <p>They are mainly aquaculture producers⁴¹ who have some control over the aquaculture activity. They are also women fish processors and traders (usually in the 25-50 age group). Few young people are in this group</p> <p>All these categories of actors are already active in local supply chains or have the potential to hold functions such as: suppliers of inputs (fingerlings, fish feed), trainer or referent in support of young people wishing to embark on aquaculture in production or processing.</p> <p>They can be aggregators of producers and products (organization of production, collection and marketing of aquaculture products) or bearers of economic initiatives in one of the related trades.</p>	<p>Inclusive productive partnership. The project support will enable the fish farmers of this category to access facilities according to their business needs (including access to credit with attractive conditions negotiated with partner financial institutions, training, exchange visits, etc.). The capacity building foreseen for them (component 2) will enable them to strengthen their role as suppliers or aggregators in local supply chains, developing equitable business relationships with C.1 and C.2.</p>	200
Total		31000

Other Categories of Beneficiaries

35. One of the rural development perspectives envisaged through AFAP II is to include the intervention approach aimed at target audiences and all the actors of the aquaculture and small-scale inland fisheries development ecosystem in a logic of development of sectors/value chains supported in a new economic and commercial paradigm in order to better respond to the various challenges of food and nutrition security, climate change resilience and sustainability of support approaches and investments. This perspective will be operationalized through the promotion of dynamic and operational partnerships with more structured and efficient economic entities such as small and medium-sized (subsidiarily large companies) likely to play the role of aggregator for the construction of inclusive partnerships. This perspective will be operationalised through the promotion of

³⁹ They are small aquaculture producers, most of whom run a farm comprising between 3 and 10 ponds of less than 450 m2 in size with a production level of less than 500kg of fish per cycle and per ponds.

⁴⁰ These are young people who are not in school or are in school (young people with or without technical or vocational agricultural education, young people at post-primary, secondary or even higher level) who aspire to start a business in aquaculture

⁴¹ These aquaculture producers sometimes have up to 20 or even 25 ponds larger than 450 m2 and less than 900 m2 in size and have a production of about 1 tone per cycle and per ponds. They conduct aquaculture activity consistently on average over 2 production cycles per year and manage to market 900 kg of fish per year and per ponds. Their turnover per sale is around 3 million KZ on a regular basis.

dynamic and operational partnerships with more structured and efficient economic entities, such as small and medium-sized enterprises (SMEs), which are more likely to play the role of aggregators in building inclusive partnerships.

36. These categories of beneficiaries will include private sector service providers along the inland fisheries value chain that will provide various services, such as value addition, input (seed and feed) and output market linkages, pond excavators, etc. Support for these first level target groups will include support for strengthening organisational dynamics and various incentives to generate key results that will enable the achievement of the project objectives in terms of economic integration of youth and empowerment of small-scale fish farmers and women.

37. Through nutrition support activities, AFAP-2 will reach almost all households in the intervention area, particularly households with malnourished children under 5 years of age (stunting, micronutrient deficiency) with a view to better responding to food and nutrition security issues in the project area. The project will pay attention to economic initiatives involving fish products with high nutritional value. Gender-sensitive education activities integrating awareness-raising on gender-based violence (GBV) as well as communication activities and dissemination of innovations promoted and the knowledge generated will also make it possible to reach several other people in households in the intervention area.

38. *Indirect beneficiaries.* Those category may be more than the target direct beneficiaries and these will include: a) fresh water fish consumers who will benefit from increased access to consistent supplies of good quality fish/fish products; b) communities/households living in the vicinity of AFAP-2 locations but not members of the target cooperatives will benefit from Project initiatives such as boats and other equipment provided to the CCPs, and the infrastructural investments to be made on landing sites in lagoons, roads, the hatchery and other investments for communal use (such as pit-latrines, portable water supplies, etc.).

39. *Public and private structures.* These include administrative entities such as provincial and communal departments for the development of fisheries and aquaculture, monitoring of nutrition issues, literacy, integration of young people, social and gender issues, climate change issues, etc. This category also includes service providers, local counsellors (such as extensionists, community development and sanitation agents (ADECOS), etc. The role of these support actors is to raise awareness, train and coach the beneficiary communities, to support all the target groups to get to know each other and to discuss the major factors that limit their respective performance and the possibilities of collaboration to remove these constraints in the long term. The project will train all these categories of actors so that they can better support the target groups to control the use of goods and services and the management of their farms and the products generated. AFAP II could reach about 1,000 first-level beneficiaries in this context.

40. The project could also provide targeted support to certain institutions, possibly including the consular chambers, in particular the Chamber of Trades, the national institutions in charge of literacy, those in charge of nutrition, to support the development of training curricula in their field of competence, and in connection with the project's activities. Other actors will also be able to benefit from the project's support. These are: (c) Civil Society Organizations (CSOs), (d) research institutions and universities, (e) public institutions and private structures involved in the production, certification and dissemination/marketing of inputs in the field of aquaculture and fisheries, (f) public and/or private structures in charge of defining hygiene and product quality standards; etc.

41. All these structures, which provide the support and services necessary for the development of the sectors, as well as those in charge of vocational training and the integration of young people, will benefit from various technical and institutional support and capacity building depending on the services they will provide to specific target groups and other actors in the project's target sectors or for the conduct of certain specific activities that will be carried out as part of the project (such as functional digital literacy). As such, they are major players in support for the development of the various value chains

and deserve special support and accompaniment (on request) including various capacity building (training, equipment and adapted tools, etc.) for a better performance in the local services to be provided direct beneficiaries of the project in their path of progression and entrepreneurial development.

42. The use of community-based socio-economic infrastructures (tracks, markets, etc.) will benefit all the actors involved in the support chains, from production, processing to marketing/consumption of products, as well as all the populations in the project intervention area. The knock-on effects on the professionalization of the activities carried out by the direct target groups will make it possible to reach the agricultural workers who are members of their households and well beyond. With training for nutrition clubs/VSLA groups/resilience funds, professional livestock farmers' organizations, the number of beneficiaries could increase sharply. The project, through support to direct beneficiaries, will contribute to the creation or consolidation of approximately 15,000 sustainable jobs (at a rate of 1.6 jobs per economic entity supported).

Table 5: AFAP-2 Target Group Estimation

Level	Beneficiaries			
	Total	Women	Youth	Persons living with disabilities
Portée AFAP-2	31000	12400	9300	1550
Support systems	25000	10000	7500	1250
Nutrition Activity	11000	4400	3300	550

Targeting Strategy

43. In line with IFAD's targeting policy and government policies aimed at the social and economic inclusion of the most vulnerable groups, including women, youth and smallholder farmers (aquaculturists and fishers), the project will have a targeting, participatory, inclusive, flexible, gender-sensitive and youth-centred targeting strategy that addresses the most important issues concerning. This strategy will be developed from the start of AFAP-2 and will identify specific challenges to reach the most vulnerable and poor groups and set up economic activities that take into account the socio-economic context.

44. The strategy will be based on the recognition of differences in terms of needs, constraints and opportunities for support for target groups (in this case youth and women). It will make it possible to identify the specific challenges to reach the most vulnerable groups, and to scale support to increase the possibilities of inclusion of the poorest households. The strategy will take into account the level of poverty and vulnerability of households in specific groups (smallholders, women, youth, poor and food and nutrition insecure households, persons with disabilities, etc.). In all the activities to be implemented by the project, the targeting strategy will be operationalized through a three-dimensional mechanism: geographical targeting, direct targeting, self-targeting, all backed by facilitation and empowerment measures.

45. The geographical targeting of the production basins will make it possible to determine the areas of intervention and will be based on socio-economic targeting to direct the planned support towards the priority target groups, guarantee sustainable results and

impacts on the living conditions of the targeted rural populations and promote their empowerment.

46. Direct Targeting – This mechanism will allow the project to ensure the inclusion of the priority target group to grant them the opportunity to access the resources and initiatives mobilized by the project. Direct targeting will target extremely poor and vulnerable households (including those chronically nutritionally insecure, unemployed or underemployed youth groups, fishing communities (who are in small-scale fishing), people with disabilities who are victims of various marginalizations). The mechanism will include specific groups including vulnerable fishing households (for the most part), poor youth and women heads of households who are food and nutrition insecure, adolescent mothers, people living with disabilities, any young person or woman who is a victim of any form of exclusion or violence, including gender-based violence, etc. The mechanism will be supported by eligibility criteria established in a participatory and transparent manner. In addition, participatory participation should reduce the risk of some benefits being captured by more dynamic or influential groups. The role of this consultation framework will be to ensure that the beneficiaries are primarily women heads of household or widows, young people aged 15 to 35 (50% of whom are young women) who are in or out of school.

47. Community Targeting – This type of targeting will mainly be used for the identification of households benefiting from the actions foreseen in Component 1: "Sustainable Inland Fisheries and Small-Scale Aquaculture Production". Following a direct targeting mechanism, the project will pay particular attention to identifying, characterizing and selecting the poorest households within fishing communities. The objective will be:

- ensure that the most vulnerable very small-scale fishers, smallholder aquaculturists and young heads of household are the beneficiaries of the project's support;
- reduce the risk of more dynamic and/or influential groups grabbing certain benefits, including aquaculture kits and other goods and services facilitated by the project (e.g., developed ponds, boats, kiosks or small fish shops, processing kits, restored aquaculture tanks, etc.);
- establish/restore gender equality at the household level, through the use of participatory and interactive methodologies such as the Gender Interactive Learning System (GALS) and⁴² a gender transformation approach⁴³;
- promote inclusive agricultural and pastoral models for women and youth;

promote inclusive and participatory dialogue between stakeholders, including farmers and herders, displaced communities and host communities

- promote and/or strengthen inclusive and participatory dialogue between cross-border communities.

48. The identification of vulnerable households will be based on two specific approaches, namely: (i) the analysis of livelihood behavior in relation to the level of food and nutrition insecurity, the issue of sanitation of the living and working environment and in relation to other types of threats to the resilience of livelihoods and (ii) the methodology of household economic analysis for the identification of households⁴⁴ eligible for productive support⁴⁵ and the identification of unemployed or underemployed youth. Targeting will give importance to the level of vulnerability and the status of young people or women heads of household. The selection criteria to be used in the context of direct targeting will be based specifically on (i) technical aspects to assess the technical and economic quality and financial viability of the entrepreneurial initiatives to be supported as well as the motivation of the initiators; (ii) criteria based on age, sex, family situation and employment status,

⁴² Gender Action Learning System (GALS): The GALS methodology helps women and men in households and communities to express their aspirations, develop plans to achieve their wishes, and find solutions to overcome the constraints they face. Men and women discuss the division of labour, access to and use of income and other resources, and benefit-sharing.

⁴³ Gender transformative approach to transform gender roles and relations between women and men, and promote greater equality, responsibilities, status, women's access and control over resources, services and decision-making. This approach goes beyond women's empowerment.

⁴⁴ This is the so-called HEA approach: Household Economic Analysis

⁴⁵ Progressive support for the creation or strengthening of productive assets

with a view to ensuring the expected profile of beneficiaries (young women, heads of household, unemployed or underemployed).

49. An inclusive consultation approach will be adopted to facilitate the participation of all socio-professional categories in the planning and implementation of activities. In the context of community targeting involving marginalized or sensitive people (such as people living with disabilities or other marginalized groups including ex-combatants, etc.), the project will rely on their organization/association for their targeting and will be able to enhance the Prior Informed Consent (PPIC) approach defined in the Environmental and Social Management Framework (ESMF).

Eligibility Criteria

50. *Direct targeting mechanisms* will be based on eligibility criteria (age group, type of activity and orientation of the activity towards the market, needs and aspirations of the holder of the economic initiative to be supported, degree of vulnerability of the household to which he belongs, level of education or literacy, socio-economic status, degree of motivation for the activity that is the subject of the request, etc.). The criteria to be adopted will be established in a participatory, transparent and collaborative manner with the beneficiaries and other basic actors in the value chain, the IFAD projects underway in the intervention area, the technical partners involved in the collaboration for the effective care of poor and vulnerable households (including communities in need of food and nutrition); the structures in charge of the development of the fisheries sectors, and those in charge of vocational training, the promotion of youth entrepreneurship (in particular), the structures in charge of nutrition issues (particularly in its prevention dimension), the structures providing services and technical structures of the State, responsible for the technical support of beneficiaries.

51. *Self-targeting* mechanism seeks to know the needs and constraints faced by the target groups and (including the most vulnerable) and the solutions to be provided to ensure that the goods and services offered by the project meet their profile, priorities and livelihood strategies. Self-targeting mechanisms will be used for the targeting of individual harvester or aquaculturist a-promoters, b-groups of promoters already structured (e.g. formalised cooperatives, enterprises or groups of enterprises, umbrella organisations, etc.). Self-targeting will be used for the selection of beneficiaries of the activities foreseen in component 2 "*Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development*".

52. *Eligibility criteria for beneficiaries* – The targeting of beneficiaries, the eligibility of their application as well as the structuring support and investment to be supported by the project are intimately linked. In general, the eligibility of potential beneficiaries for AFAP-2 support will focus on five aspects, namely:

- Profile of the operator carrying out the support initiative (age, gender, socio-economic status, degree of vulnerability);
- Profile of the activity to which the application is made (type and nature of the activity that is the subject of the application: link in the value chain concerned in line with the economic targeting of the project, nature of the support needs requested, level of investment required, absorption capacity of the project owner, interest in the development of the value chain in the basin, etc.);
- Experience in the activity that is the subject of the application (differentiated for candidates with an economic initiative in start-up or development);
- Dynamism, level of commitment and investment of the actor carrying the request for support);
- Ability to mobilize the matching requested from the promoters who submit the support requests (for the entrepreneurs who will be included in the PPPs); economic and social viability and economic and financial profitability of the activity.

53. This work will make it possible to group applications by category according to profiles to better guide the promoters to be supported (including youth and women) in the path that best suits their profile.

54. *Facilitation and empowerment measures* (awareness-raising, information and communication). The strategy will be supported by measures to facilitate targeting, including awareness-raising, information and communication campaigns on the programme, its objectives, approach and approach, and operational measures to promote the inclusion of poor rural youth. Facilitation and empowerment measures will promote the development of profitable economic initiatives, rural entrepreneurship (especially for youth and women) and increase opportunities for the inclusion of vulnerable people (all priority households) in economic activities that can strengthen their resilience and contribute to the improvement of their economic and social well-being.

Operationalization of the Strategy

55. To facilitate a good operationalization of the targeting strategy, the project will organize at the start of the implementation and based on the results of the basin study, a workshop per province (the administrative unit of interventions) on the targeting strategy to internalize, harmonize with the targeting and social inclusion approaches underway in the same areas. This stakeholder workshop will include technicians from structures in charge of developing activities in the fisheries sectors, actors in charge of food and nutrition security issues in the provinces concerned. This workshop will facilitate the confirmation of geographical targeting, a better sharing of space by the different categories of actors involved, a sharing of approaches, lessons learned in terms of the inclusion of extremely vulnerable households including experiences in the development of nutrition activities, good resilience practices in response to environmental and climate issues and in the supporting provinces.

Stakeholder to be involved in the operationalization of the strategy

The operationalization of the targeting strategy will follow a participatory approach throughout the project implementation process. The process will involve fishing communities, various fishermen's or aquaculturists' organizations, POs in the targeted areas and their umbrella structures and consultation frameworks, women's and youth associations and their national and provincial consultation frameworks, local authorities (provinces, communes, villages, notables). Self-targeting will make it possible to define and validate with populations and producers in particular, eligibility criteria based on the level of poverty, vulnerability (food, environmental and health, etc.) and access to resources, including water resources and their efficient management, and markets, etc. and to facilitate the identification of target groups (including participants in the different partnership models to be supported by the project).

This aspect will be facilitated by raising awareness and providing information about the project's opportunities for the most vulnerable groups, including women and young people. In addition, an information and communication strategy throughout the duration of the project will strengthen the scope of the project, the transparency of targeting mechanisms, ensure that information is made available to all, and that targeting issues, as well as gender and youth are taken into account.

56. Targeting activities will be carried out by the project in order to ensure capitalization, experience and to carry out the evaluation of its impact.

The following steps will modulate the targeting:

Step 1. Organization of Basin and Value Chain Studies and final selection of localities of intervention

As soon as the pre-investment activities start, the basin/value chain studies will be launched and the results will also guide the targeting strategy. The facilitators of the structures providing services for the project and the IPA technicians will be at the heart of the implementation of the targeting strategy, the operationalization process and the monitoring of its effectiveness. To this end, they will be trained and retrained (periodically) on the system to be put in place for targeting and its operation. External expertise will be mobilized to support the implementation of geographical targeting (targeting of areas of concentration and localities of support). The result of this step is the list of potential localities (villages or clusters of villages) production basin (fisheries and aquaculture) to be retained in the area of concentration. The selection of these support localities will be refined at the start of the project according to the

criteria mentioned (see Table 4). A joint committee made up of representatives of IPA, the decentralised local authorities and other members of the project team will decide on the results of the basin study and will select the areas of intervention in each province/municipality/municipality where the project activities are concentrated.

Step 2. Awareness-raising, information, communication of target groups

The project will carry out targeted awareness-raising, information, nutrition education and communication activities for potential beneficiaries in the localities of intervention on the project, its targets, its modus operandi, targeting mechanisms as well as mechanisms facilitating self-targeting by clearly indicating the eligibility criteria of the economic initiatives to be submitted through the applications. All activities related to awareness-raising, information, communication on the project's activities, targets, modus operandi, beneficiaries and the mechanism of their targeting, as well as eligibility for different types of support, as well as generic activities on nutrition education, will concern the entire population of the project intervention area and, if necessary, may go beyond.

Step 3. Implementation of the various mechanisms for the targeting of beneficiaries

The direct targeting mechanism will target specific priority groups classified in category C1 of the project (see Categorisation table) and certain households in category C2. These are primarily fishing communities, young people and women heads of households/farm managers in extreme poverty, chronic food and nutrition insecurity and/or victims of a very high level of decapitalization. This direct targeting mechanism will also target certain young people seeking integration into an economic activity, adolescent mothers, and highly vulnerable communities who exclude themselves from decision-making circles because of their marginalization. The project will pay particular attention to people with disabilities and who are able to work for their economic and social integration. This direct targeting mechanism will be highly participatory and inclusive.

o The self-targeting mechanism

The mechanism will be used mainly for C3 groups. Self-targeting will make it possible to identify and verify that the planned activities meet the needs of each target group category and the needs of their operation. Self-targeting will enable women, young people and smallholders (fishers, aquaculturists) to promote (i) the inclusion of women and young people in the socio-economic context by responding to the needs expressed (access to factors of production including land, financing, information, training, advice/accompaniment), (ii) economic and social partnerships for its economic and social inclusion. For the implementation in each intervention area, information/animation/communication campaigns of the communities will be deployed with the active participation of the target group and other stakeholders. This approach will make it possible to better target the nature of the action as well as the mechanisms of responses to the challenges of food security, nutrition and climate change

The self-targeting will be done by call for applications for the promoters to be targeted to benefit from the project's support and especially to identify the aggregator or manager promoters who will integrate the models of productive and/or commercial partnerships to be supported by the project and as well as in public, private and producer partnerships (PPPs) for the management of collective infrastructures and other structuring equipment to be facilitated by the project. This mechanism will also facilitate the targeting of micro and small-scale entrepreneurs (youth and women) individual aquaculturists to be targeted. Communication and awareness-raising campaigns (radio spots, information meetings, explanation of forms) aimed at its promoters and their organisations. The Call for Expressions of Interest mechanism will be launched annually to target new promoters

I.3.3: Gender and Youth Strategies

57. The Gender and Youth Inclusion Strategy will be developed at the same time as the Targeting Strategy, once the baseline survey and nutritional survey have been carried out. The latter should seek to provide a qualitative and quantitative characterization of the situation of women and young people, at the start of the project, within their communities, cooperatives/associations and households. A good understanding of intra-community dynamics (women's social status, power relations, participation in community decision-making, representation on cooperative governing bodies, etc.) and intra-family dynamics

(male/female relations, division of tasks, decisions on household finances, situation of female heads of household, etc.) will be an important lever in defining an effective and relevant gender and youth inclusion strategy.

Objectives of the Gender and Youth Inclusion Strategy

The Gender and Youth Inclusion Strategy should achieve the following objectives:

- Ensure that implementation approaches and mechanisms are adequate to meet targets for targeting youth and women heads of household. This will require, on the one hand, an in-depth reflection on the specific constraints faced by each group and which may possibly represent an obstacle to their participation in project activities; and, on the other hand, the definition of concrete operational measures to remove or mitigate these obstacles and facilitate their participation in project activities. In particular, the Strategy will ensure that the criteria for the selection of individual beneficiaries do not discriminate between these two categories.
- Promote the economic empowerment of women and youth.
- Strengthen women's participation in community decision-making, as well as within their households: The Strategy should identify specific training or awareness-raising modules aimed at promoting a sense of self-confidence, better management of family finances or women's rights, which can be administered in addition to nutrition awareness campaigns.
- Strengthening women's participation in governing bodies: The Strategy will define the means and processes to initiate a dialogue with all groups (associations and cooperatives) that apply for the project's support regarding the representation of women and youth on their Steering Committees.
- The capacity-building plans of the various committees to be set up within the framework of AFAP-2 will thus be able to provide for training activities specifically aimed at women or young people wishing to occupy certain positions within these bodies.

➤ *Gender and Empowerment Strategy*

58. The AFAP-2 project's gender strategy is based on IFAD's new guidelines for gender equality and the transformation of gender relations, and is in line with the country's guidelines on gender equality and women's empowerment. The strategy incorporates all the gender transformative approaches set out in the country's COSOP. It will be based on a cross-cutting approach to guide gender mainstreaming in the implementation of the various project activities. During the first year of AFAP-2 implementation, consultancy will be procured to prepare a gender and women's empowerment strategy and action plan. The gender strategy will take into account the analysis of the socio-economic context, gender norms and imbalances in power relations in order to remove the constraints identified, transform behavior, contribute to the dissemination of gender promotion actions supported by the country through legal and institutional frameworks and guarantee the recognition and realization of women's social, economic and political rights.

59. The actions and capacity building to be carried out for women will take account of the main constraints facing women according to the five dimensions of women's empowerment (i) production dimension: (ii) resources dimension: poor access to and decision-making power over resources and factors of production: land, agricultural equipment, new production and processing technologies, training/information, finance/credit, etc.; (iii) income dimension: poor access to and decision-making power over resources and factors of production: land, agricultural equipment, new production and processing technologies, training/information, finance/credit, etc.; (iv) capacity-building dimension: poor access to and decision-making power over resources and factors of production: land, agricultural equipment, new production and processing technologies, training/information, finance/credit, etc. (v) time dimension: agricultural and domestic workloads occupy the whole day and are not evenly Distributed in relation to men.

60. The project will work to strengthen equity in access to resources and benefits facilitated through the supports and ensure capacity building for women in various fields

to increase their technical capacity to effectively conduct their activities in the field of fisheries and aquaculture. Capacity building will include (i) agency (capacities, skills, confidence), (ii) change in relationships within the household and at the community level, (iii) transformation of structures (basic institutions, production and management organizations including markets, social norms⁴⁶ facilitating progress towards gender equality, and the empowerment of women and youth). The project will promote inclusive participatory approaches, including household-based methodologies and the Gender Action Learning System (GALS).

61. The project will support the empowerment of women and girls from vulnerable households who have economic initiatives to be strengthened or who wish to start a business in any of the areas of support in the fisheries and aquaculture sectors. Targeted support will be given to women and girls and will cover both technical and farm management aspects. This support will be structured and calibrated on the basis of their specific needs, (b) the needs of their farm/enterprise and (c) their absorption capacity and on the nature of the economic initiative they are carrying out in the sectors concerned.

Initiatives to empower women

The support concerns the equitable distribution of kits and other production factors as well as the learning of good practices, equitable roles in the management of resources or goods facilitated by the project, including resources at the community level, so as to generate more impact on the status of women within the household and the community. This support will also help to promote (i) women's choice and decision on the organization of their economic activities; (ii) their access to resilient technological and practical packages (kits, training); (iii) the creation or rehabilitation of assets and access to adapted and modern equipment (reducing the arduousness of work and saving time); (iv) control over the management of revenues from their activities; (v) participation in consultation frameworks for governance in support streams; (vi) access to and participation in the management of processing, storage and marketing infrastructures (markets, kiosks) and shared economic spaces; (viii) the inclusion of women in business partnerships; (ix) access to all communication systems and mechanisms put in place as part of the project.

62. Priority will be given to women "heads of households" or "heads of farms", whether widowed or not, and from vulnerable households, as well as households managed by young people during the implementation of the project to improve their productive assets and capacities from the planned support schemes.

- The project will support literacy, the establishment of Dimitra Clubs, "resilience funds" and the representation of women in local natural resource management committees (such as the CCPs that will be created).

63. Women's participation in all these schemes will promote their leadership development, financial capacity building and participation in decision-making. The financial inclusion of women and girls will be strengthened through development support, the resilience fund approach (promoted by FAO and already tested in several projects⁴⁷).

⁴⁶ (i) EMPOWERMENT: Build confidence, self-esteem and strengthen the aspirations of men and women, as well as the knowledge, skills and capacities that individuals need to thrive; (ii) CHANGING relationships: Transforming existing power relations between men and women in the context of private relationships and social networks, and in terms of group membership or activism, citizenship and market negotiations; (iii) TRANSFORMING STRUCTURES: Supporting the transformation of discriminatory social norms, customs, values and practices (in the informal setting), as well as laws, policies, procedures and services (in the formal setting).

⁴⁷ The concept of "Resilience Funds" (CoR) revolves around an approach centred on agro-pastoral communities - composed of men and women - This approach promotes the empowerment and engagement of communities in the application of good agricultural, nutritional, environmental, economic, and social practices through a system of conditionality that allows long-term objectives to be achieved through activities with short-term impacts term. Resilience Funds apply particularly well to women's associations, allowing them a certain form of empowerment as well as recognition within the community for both their economic and social roles. (FAO, 2015, Resilience Funds),

- Quota measures (40% women) will be followed in the implementation of all management mechanisms and all community monitoring and surveillance committees and infrastructure and equipment management committees to be set up within the framework of the project.

64. The objective is to ensure the involvement of women in all decision-making processes related to the governance and management of the collective sites and infrastructures to be supported by the project.

- The project will focus on raising awareness and training for behaviour change, valuing alternative models of masculinity. The project's support for political engagement will also be done with a focus on advocacy, training and awareness-raising on the needs and interests of women (including youth)

65. In total, the project will establish an inclusion and empowerment pathway that will target 40% women and girls and will be based on the removal of exclusion factors in the aquaculture sectors, the creation of decent employment opportunities, the strengthening of their productive and entrepreneurial capacities and the promotion of leadership, self-confidence and social intermediation to facilitate and optimize the participation of women and girls in decision-making bodies.

66. The project will identify and train women and men (relays) at community level on gender equity and women's rights. These relays will then be able to run awareness/information sessions in local communities. In addition, it will be necessary to strengthen the ongoing monitoring of actions aimed at women to ensure their sustainability and ownership, both at the level of the women themselves and at the level of the players involved in implementing the project. The project's technical team will be trained in the gender and social inclusion strategy in order to: (i) play a role in driving and supporting the project's gender dynamics; (ii) adjust, where necessary, the actions implemented to prevent women from dropping out and being excluded (taking account of the context and socio-cultural realities of the intervention areas as well as the dynamics of collaboration that exist or arise in the communities and within the farms); (iii) ensure that aspects of gender mainstreaming and the inclusion of young people are systematically taken into account and that monitoring and evaluation indicators are disaggregated by sex and age. (See details in the appendices on gender and social inclusion).

➤ *Youth Strategy and Implementation*

67. In line with IFAD's guidelines on youth, the inclusive targeting approach to be adopted by the project will give young people (girls and boys) the opportunity to benefit from the goods and services put in place by the project in order to carry out economic activities that will make them self-sufficient and protect them from poverty, food insecurity and attempts at exodus. The youth strategy to be developed by AFAP-2 will be based on targeted actions to: (i) remove the constraints limiting the inclusion, active participation and empowerment of young people (men and women) in all project activities; (ii) create opportunities to generate decent incomes and improve their living conditions; (iii) strengthen their productive and entrepreneurial capacities by facilitating access to resources and production factors (land, water, inputs, finance/credit, vocational training, technologies, advisory support); and (iv) promote young people's leadership and participation in decision-making bodies at household level, within community groups and all consultation frameworks, and in the management of marketing support infrastructures.)

68. AFAP-2 will support 9,300 young people (girls and boys) in the three categories (i.e. 30% of the total target). The support targeted at young people will involve (i) identifying the aquaculture and fisheries professions or services that are most favorable to them, and communicating the results of this study effectively; (ii) raising awareness of key messages that directly appeal to their interest, (ii) guidance and support in developing their request for support, (iii) training and close, individualized support to help them a) set up as aquaculture promoters and b) access appropriate funding to develop their

economic initiatives. All the mechanisms planned to strengthen the capacities of beneficiaries will target young people (young individual start-ups or developing entrepreneurs, young people who are not in employment and holders of eligible business ideas in any of the links in the value chains selected or in related trades including (young start-ups) in innovative information technologies to support the development of activities or young people applying to manage the marketing infrastructures and equipment to be created by the project (cf. component 2)).

69. The project will provide comprehensive and sustained support over time in terms of strategic thinking and entrepreneurial training, development of business plans and management support, facilitating access to financing and appropriate digital options, formalization, negotiation of partnerships, etc. The project will strengthen the provincial institutions in charge of youth issues, enabling them to participate in their targeting. Institutional support will be provided through the dissemination and appropriation by young people of the government's youth policy and strategy in line with IFAD's approach. (See details in the appendix on gender targeting and youth inclusion).

70. *Inclusion of people living with disabilities* – To relieve poor households and strengthen the participation of people with disabilities and their insertion/inclusion in the economic process, the project provides for a 5% quota for people with disabilities. Their socio-economic inclusion requires knowledge of their needs and capacity in relation to operations, jobs, livestock activities or related trades that are best suited to their conditions. To this end, the project will include in the first studies (i) the characterization of the needs of people living with disabilities and the opportunities in the aquaculture subsector that are favorable to them (ii) the conditions for carrying out these activities. The results of this characterization will make it possible to propose appropriate pathways to support the socio-economic inclusion of people with disabilities. The conditions of support will be studied with the organizations of people living with disabilities and those that support them.

71. *Facilitation and empowerment measures for youth, women and people living with disabilities* – To ensure the proper ownership and participation of young people, women and people living with disabilities and with a view to limiting their dropping out of the various support pathways planned, the project will put in place specific measures to support them. These are mainly: (i) development of incubation and training sites, (ii) provision of kits and equipment to reduce the arduousness of the work and adapted (taking into account the specific needs mainly of young girls), (iii) adaptation of adapted time slots for training, development of childcare species next to activity sites, etc. ; (iii) establishment of a mechanism for listening and dialogue with young people, women and persons with disabilities at the provincial level, etc.

➤ *Monitoring and evaluation of the Social Inclusion and Gender Strategy*

72. The project will work specifically on the monitoring of the functioning of the various targeting mechanisms and in the implementation of support towards beneficiaries with the community institutions at the grassroots, the target groups themselves and the authorities of the decentralized local authorities in a non-exclusive manner, while paying attention to the diversion of benefits by the more skillful groups ("elite capture").

73. The application of the targeting strategy is the responsibility of all technical teams as well as the various implementation operators. All project staff will receive training on approaches to targeting, social inclusion and the integration of gender and youth into the interventions to be conducted. Strengthening the monitoring of targeting on the basis of disaggregated data (by sex, age and socio-economic status) to be collected periodically will make it possible to verify the evolution of: (i) the number of women and young beneficiaries, (ii) gender equality in access to productive resources, (iii) the effective involvement of the various sub-groups in the planned activities; (iv) the poverty/vulnerability of women and young beneficiaries as a result of the project's actions; and (v) indicators of women's and girls' empowerment. Compliance with quotas and

guidelines in the project's targeting strategy will be a criterion for the selection and renewal of contracts/partnership agreements with service providers.

74. The project will integrate a gender analysis of value chains into the baseline studies. This deliverable will be specifically integrated into the terms of reference of the experts who will carry out the reference studies and characterization of the basins and sectors. The results of this study will be used in the review of the project's gender and social inclusion strategy. In addition, the project will ensure that a gender expert is required to be included in the teams that will carry out the major studies to be commissioned by the project. An expert in gender, social inclusion, youth and nutrition will be recruited to the project implementation team and will have very specific terms of reference (see Gender and Social Inclusion Strategy Annex). All project staff will receive training on the issues and approaches of targeting, social inclusion and the integration of gender and youth in project interventions. Reporting on the implementation of the gender and social inclusion strategy and the evaluation of the results achieved will be systematized in all project and partner reports. In year 3, the project will launch a process of mid-term evaluation and capitalization of the implementation of the gender strategy, which will be reported to the Mid-Term Review team. The results will be widely disseminated to remobilize stakeholders around gender equality and social inclusion issues.

➤ *Process for the Delivery of Support to Beneficiaries*

75. From the start of implementation, the service providers involved in implementing support for beneficiaries have a key role to play in targeting the various categories of target groups. To this end, they will be trained to assist with targeting, close coaching of highly vulnerable households, support for the setting up of nutrition clubs/savings and credit groups/resilience funds. They will help all the target groups to get to know each other and discuss the major factors limiting their respective performances, as well as the possibilities for collaboration that could help each category of player to overcome its constraints in the long term. The project will also train them to support direct beneficiaries in mastering the use of goods and services and the management of their farms and the products generated.

76. Process for implementing support for beneficiaries – The implementation process for beneficiary support will be structured around the following points:

- a) Communication, information and awareness-raising on activities and support opportunities for the target categories;
- b) Pre-identification by direct targeting (category c1) or by call for expressions of interest (categories c2 and c3) of potential beneficiaries;
- c) Selection of beneficiaries and validation of applications ;
- d) Categorising and guiding candidates through the various pathways envisaged;
- e) Initiation of the support process and assistance in formulating and preparing applications for support;
- f) Capacity building (according to profile);
- g) Implementation of facilitation measures (support, technical and financial support depending on needs and the financial support selected);
- h) Activation of facilities (for the private sector) to support the building/strengthening of commercial/productive partnerships (including public-private-producer partnerships, producer organisation service companies; and
- i) Monitoring the implementation of the beneficiary's activity and strengthening various capacities.

77. **Support process for the growth path** – The project will recruit service providers in business development engineering (aquaculture and fisheries), community leadership, entrepreneurship and business coaching, who will be trained in intervention approaches and the targeting process. These implementing partners will be responsible for leading and monitoring the process of identifying and selecting potential eligible beneficiaries for the various support schemes planned. The support to be provided to each beneficiary will

depend on the pathway into which they have been directed. Overall, the support will involve:

- a) Capacity-building for beneficiaries through individual or group training and consultancy services provided by national and/or international experts to help them run their businesses;
- b) Preparing a simple operating account for small-scale operators and/or a business plan (market study, marketing strategy, sales action plan, financial forecasts, etc.) for entrepreneurial activities;
- c) Capacity building in farm management and also in finance (and: or administration for young people's businesses);
- d) Support in accessing credit and other facilities provided by the project;
- e) Technical and operational support: access to technologies adapted to needs, improvement of operational processes, certification procedures, etc.;
- f) Individualized coaching (depending on profile) and the areas of activity concerned.

78. Overall, categories C2 and C3 will benefit from support for entrepreneurship and all the facilities that come with the empowerment of companies (access to training adapted to their professionalization and access to financing (through the financing mechanisms provided) to develop their business. To support entrepreneurship training, the project will build on the socio-professional training systems already in place to facilitate training and incubation (particularly for young people who want to) and will use the referents to be set up from the first cohort of young people or aggregating entrepreneurs supported through business partnerships.

I.3.4: Food and Nutrition Security Strategies⁴⁸

79. The project will develop a nutrition strategy and action plan to structure nutrition actions and monitor their effective implementation. The project's strategy focuses on nutrition education and awareness-raising for behavior change by adopting good nutrition and hygiene and sanitation practices and specific targeted support for the improvement of food security and nutrition of poor and extremely vulnerable households. This component consists of deploying the community-based nutrition approach in the production basins targeted for nutrition education activities. The aim will be to implement a community-based approach to nutrition that is part of a context of acute chronic malnutrition problems in all the areas of intervention of the project and in a process of synergy of approach and complementarity of action with other nutrition interventions in the project area.

80. Targeted nutrition support will include nutrition training and assistance in the production, processing and marketing of fish-based food products with high nutritional value. Extremely vulnerable households will receive priority support and kits for aquaculture activities (installation of "nutri-ponds" and supply of fry and feed, small aquaculture equipment and small "home garden" kits, and various training courses for their installation, etc.).

81. The approach to support will be flexible and based on a continuum of support and accompaniment, starting with a- awareness-raising campaigns on nutrition and related issues; b- education on optimal nutritional practices for mothers and children and on appropriate maternal and child health care; c- training in the management of fisheries and aquaculture activities (production, processing and marketing of aquaculture products) integrated with "home garden" activities related to poultry farming; d- training in small business management, financial literacy and hygiene and sanitation to reduce malnutrition, which contributes to both morbidity and mortality among infants and young children. The support package also includes psychosocial support, training in organizational dynamics, leadership, self-esteem, functional literacy for the illiterate (in this case women and girls) and promotion of crop diversification in the fields to increase the availability of micronutrient-rich food (at an affordable cost).

⁴⁸Additional information is contained in Annex 3: Improving Household Nutrition.

➤ *Household Eligible for Targeted Nutrition Support*

82. Households in categories C.1 and C.2 that are the primary beneficiaries of component 1 activities are the main beneficiaries of targeted nutrition support activities. These are poor, economically and socially vulnerable households, particularly those with food and nutrition insecurity, whether or not they are engaged in economic activities in the small-scale inland fisheries or aquaculture sectors. In this section, the focus will be on female-headed households or households with pregnant and lactating women and households with children of under 5-year-olds, PLWHIV/AIDS.

83. The expected outcomes of this strategy are: (i) diversification of diets for women and children under five, (ii) better infant and young child care and feeding practices, (iii) improved household knowledge, attitudes and feeding practices, and (iv) a year-round supply of varied, healthy and nutritious foods.

84. Expected output: 11000 households and their members (children under 5 years of age and adolescent boys) in the areas of concentration of the project (i) were sensitized and supported in the diversification of the conduct of production activities: (aquaculture and artisanal fishing) associated with the conduct of hut garden activities (or the installation of collective fields near houses for market gardening, legumes and other nutritionally valuable species); (ii) benefit from theoretical and practical nutritional education sessions benefiting from training on processing and have seen their income increased through the "Nutri-processing centers", as well as the nutritional situation of their offspring thanks to food supplements, (iii) benefit from targeted actions and support for the local marketing of processed fish products, including fortified flours.

➤ *Planned Actions and Implementation Process*

85. Overall, the progressive support model envisaged at this level can be summarized in 8 indicative phases, some of which will take place simultaneously: (1) direct sensitization of vulnerable households and support for the establishment of community groups (known as resilience funds); (2) the provision of a support kit for the implementation of the "nutri-ponds" and a garden of communal cabins/gardens; (3) facilitation, coaching and mentoring, including community management training and financial management training (coming soon); 4° technical training in the implementation of aquaculture, nutrition education, management of an income-generating activity); (5) support for the progressive replication of the collective aquaculture/collective garden production model for the empowerment of each household/asset transfer; 6° creation of a Mutual Aid and Solidarity Association/Nutrition Club/Village Savings and Credit Association (VSLA); (7) referral to a microfinance institution (if necessary); (8) Relationship with market operators (aggregators and others). The content and duration of these phases will be modulated according to the needs of the target group. The proposed progression model for this target category will include two cycles of support (full - approximately 18 months maximum) and is primarily intended for C.1. The long-term objective is to strengthen the food and nutrition security of beneficiary households, empower them and strengthen their social integration in decision-making spheres. The following activities will be carried out throughout the implementation period of the project:

a) *Sequence 1: Support for the integrated management of severe acute malnutrition (SAM) with or without medical complications*

86. *Objective* – The objective of this intervention is to contribute to the substantial reduction of the rate of severe acute malnutrition (SAM) in the project area.

87. Field findings and literature on nutrition in Angola have shown the presence of acute malnutrition problems affecting children aged 6 to 23 months in rural areas. The project will pay particular attention to this issue by targeting households with children under 6 to 23 months of age. Through this component of activities, the project aims to equip localities and structures involved in the implementation of the project, with the capacity to identify the signs of poor nutritional status and hygiene and enable them to seize opportunities for nutrition and support counselling to lead the target groups to

improve their nutritional and hygiene situation. Four main activities are envisaged for the *Sensitization and information of beneficiaries and partners of the implementation of the project on SAM* and its consequences. These are: (i) Establishment of the baseline situation on the status of SAM; (ii) Selection, training and equipment of community relays and service providers; (iii) Awareness-raising to increase early and active screening of children with severe acute malnutrition (SAM); (iii) Promotion of dietary diversification for children aged 6 to 23 months suffering from SAM.

b) Sequence 2: Support for nutrition and hygiene education for behavior change "Nutri-change"

88. The project will intervene to reduce unbalanced eating habits, which are among the main causes of malnutrition. The planned actions aim to: (i) raise awareness on good hygiene practices and balanced nutrition; (ii) provide information on access to health, especially for young mothers and pregnant women; and (iii) influencing gender inequality that diminishes women's control over food management.

89. *Nutrition Knowledge Attitudes and Practices (KAP) Survey and Nutrition Gap Assessment Study (Value Chain/Market Profiles)*. This study will focus, among other things, on food supplements and improved recipes to be promoted within the framework of this project. This study will combine a literature review, focus groups and field surveys with households, food technologist researchers, technicians from structures in charge of nutrition issues at the national level and in the five provinces. This survey will also include: (a) local flour producers, (b) neighbourhood shops, (c) supermarkets; (d) local markets, (e) consumers and (f) other resource persons deemed relevant to make a substantial contribution to the understanding of the eating habits and practices of the populations of the project areas. The study will (i) map local experiences; (ii) study the market for infant flour in the intervention areas; (iii) identify local revenues for improvement; (iv) investigate potential formulations of infant flour; (v) establish validated recipes that respect macro and micronutrient content and comply with standards for microbiological analyses. The study will be carried out in Year 1 of the project, and will guide the achievements of the other years regarding the food security and nutrition component. At least 100 people including women/mothers will be surveyed per province. The KAP study will be carried out 3 times during the implementation of the project: one at the beginning, one at the mid-term and another at the end of the project.

90. *Nutrition education*. The project's target groups as a whole will benefit from awareness-raising activities on dietary diversification, food safety, hygiene and fish protection, fish processing and conservation, and other nutritious foods needed by adults and children. The "nutri-pond" integrated into the "home garden" beneficiary groups is immediately the window and the main lever for a quick win for all types of targeted "nutrition" interventions. Through Behaviour Change Communication (BCC), these groups will benefit from nutrition messages, food guides, improved local recipes and advice on the composition of complete meals for young children. The project will facilitate the systematic distribution of 'nutri-change' nutrition communication packages to all vulnerable households receiving support. Awareness-raising, information and communication activities to promote nutritional behaviour change will cover all communities in the project's focus areas.

91. Demonstrative agro-culinary techniques will be used in the educational sessions to be given by ADECOS after their trainings, in order to demonstrate in a practical way (i) the establishment of community aquaculture ponds: "Nutri-ponds", (ii) the ideal layout of hut gardens and farming systems for a combination of nutritious crops for meals; (ii) artisanal preservation and processing techniques that preserve nutritious food for the lean season; (iii) proper meal preparation methods; (iv) equitable distribution of meals in the household; and (v) the preparation of complementary meals (use of infant flours, other supplements such as milk, purees, fruit juices, etc. for infants and young children).

92. *Behavior change communication team*. The project will work with community relays and "light parent couples" to carry out essential awareness-raising, monitoring-support

and close counselling actions to facilitate the anchoring of good food and nutrition practices within the beneficiary households in the project's intervention areas (particularly households benefiting from targeted nutrition support). During the training, the community relays will define the actions to be strengthened and the participatory way to carry them out with the ADECOS (nutrition focal points for the project). A nutrition communication plan will be developed to identify the best channels for delivering nutrition messages at the community level. The "nutri-change" packages, developed as part of the communication plan, will contain several communication tools (posters, brochures, food guides, etc.) to be distributed to each cooperative in the three regions, which will serve as a basis for word-of-mouth in the communities.

c) *Sequence 3 : Strengthen nutrition nexus with multisectoral activities*

93. The objective of this component of activities is to contribute to reconstituting/strengthening the productive/ commercial capital of the 11000 households, i.e. 36% of the total 31000 target households of the project, with a view to improving their food and nutrition through the increase of their income and their capacity for self-sufficiency in food. The actions to be carried out include support for the development of nutrition-sensitive economic initiatives

94. *Installation of the "nutri-pond" integrated into the "home-garden"*. Through the activities of component 1, the project plans to support 10000 households to efficiently carry out production activities (aquaculture and fisheries). In this context, it is planned to erect community ponds, totaling 50 ponds per community and an additional pond "Nutri-pond". Vulnerable communities benefiting from "nutri-pond" will also benefit from support for the installation of a home garden (400 m²). Those who have a field close to the houses will benefit from seed support and training in production techniques to diversify their production. The project will start with a rapid diagnosis of what these extremely vulnerable households produce (in their field farm) before the plant production kits are made available in association with the nutri-pond. The results of this diagnostic study will make it possible to better size the contents of the kits (pen garden/small farmyard farm to be distributed).

95. In addition, the beneficiaries of this activity will receive a kit for the installation of home-gardens or complementary seeds for the diversification of field crops (seeds for market gardening, legumes and other nutritionally interesting species). All households benefiting from nutri-pond integrated into the home-garden will receive training adapted to their profile and close support for the ideal layout of home-gardens and farming systems for a better association of nutritious crops for meals. The project will proceed with the start-up training and sensitization of all target groups and implementing stakeholders on issues related to food security and nutrition in each province and in all localities where the project is implemented.

96. *Institutional support for the creation of "Nutri-processing" centers*. The first "nutri-processing center" will be created in year 1, at the provincial level (in the province the largest "aquaculture basin") where marketing and the creation of local demand have the potential to be rapidly scaled up. The generalized training in the first center and the establishment of the other four centers will start in year 2, after the creation of the pilot center and test for a rapid scale-up of the initiative. The bringing together of several small units from different processing units and in a close radius that promotes the pooling of these small units to make a nutri-processing center that will serve as a center for the dissemination of nutrition activities and the processing of healthy foods with high nutritional value of the Project), establishment of the center and its equipment. The first results evaluated 8 months after the start of the start-up of the center will lead to the adjustment of the training and the installation and operational curricula for other centers to be installed.

97. The trainings will include: (i) the basic principles of fortified flours; (ii) the summary of the Study; (iii) the use of equipment; (iv) the composition of the different recipes

developed, and the participatory selection of two recipes; (v) the preparation of infant flour in accordance with sanitary standards and compliance with World Health Organization standards and national standards in terms of food safety, quality and protection; (vi) packaging and marketing, marketing and convenience sales techniques; (vii) modules on post-harvest management, home food storage and good fish conservation practices; (viii) management, accounting, operation of the unit. Training refresher courses will be conducted for each center created.

98. The products from the "Nutri-processing centers" will be semi-solid or soft complementary foods, intended for consumption by children under five years of age, in the form of improved flours. Local marketing ("Marketing of healthy, nutritious fish-based products") through leaflets and community radios will generate demand for these quality complementary products. This activity will increase the consumption of complementary foods among households that are members of cooperatives and in the project's intervention areas. One center will be set up per province in a phased manner. The project will build and supply equipment to each center (see component 1), which will be operational for the production of quality CA and in compliance with health and environmental standards.

99. *Support for the establishment of VSLAs and/or resilience funds.* The objective of this approach is to sustainably bring these vulnerable groups out of their state of vulnerability by supporting them according to a progression model based on the conduct of productive activities associated with savings and credit for the improvement and diversification of their sources of income.

100. The activities planned under this component are particularly targeted at groups made up of highly vulnerable households and beneficiaries of support for the implementation of the nutri-pond integrated into the "home-Garden" as well as women processors and traders of fishery products (aquaculture and fisheries).

101. Continuous support and accompaniment will be given to vulnerable women and heads of household in particular and to all women beneficiaries of the project (in general) in their progress to integrate or form Village Savings and Credit Associations (VSLA)/Resilience Fund with the aim of constituting a fund that will serve as credit for the start-up or strengthening of an income-generating activity or to strengthen their activity. This support will allow each woman (particularly those from households in the beneficiary groups of "nutri-bridge") to begin her empowerment journey by creating her own economic initiative in the project's support sectors based on this initial support given to them by the project (i.e. the installation of a nutri-bridge integrated into the hut garden). To do this, from the start, these vulnerable households will be embarked on a vision that orients the aquaculture activity to be carried out as an economic activity through training in the management of a community aquaculture farm (with tools adapted to their profile).

102. Training on the management of production activities and resilience funds will be coupled with functional literacy in a course cycle (i.e. 6 months at most) to enable women to be operational and gain organizational maturity and management of a farm and a savings and credit union. This savings and credit dynamic that will be created is an important entry point for the financial inclusion of women and girls. VSLAs/Resilience Funds⁴⁹ are an integrated support approach promoted by FAO⁵⁰ that links and integrates productive, financial and social activities and strengthens women's economic inclusion. It is an approach that also facilitates the integration of women into inclusive partnership dynamics that respect equity in business relationships.

⁴⁹ The concept of "Resilience Funds" (CoR) revolves around an approach centred on agro-pastoral communities - composed of men and women - This approach promotes the empowerment and engagement of communities in the application of good agricultural, nutritional, environmental, economic, and social practices through a system of conditionality that allows long-term objectives to be achieved through activities with short-term impacts term. Resilience Funds apply particularly well to women's associations, allowing them a certain form of empowerment as well as recognition within the community for both their economic and social roles. (FAO, 2015, Resilience Funds),

⁵⁰ The VSLA, Club Dimitra and Resilience Fund approaches have been successfully piloted by IFAD in several projects and in several countries.

103. *Support for the development of economic initiatives for the benefit of extremely vulnerable households.* The project will support 600 women heads of household per province (i.e. 3000 women from highly vulnerable households for the five regions) from the vulnerable household group as well as processors trained in the nutri-processing centers with a «voucher" to support the promotion of sensitive nutrition IGAs. This 100,000 Kz voucher includes support for the development of a micro-project or business plans and start-up financial support (start-up KIT) for the activity that is the subject of the business plan. Depending on their level of progress, these women will also be able to benefit from the support packages provided for in component 2 in terms of support for beneficiaries and for connecting them for greater funding and access to markets (through partnerships to be facilitated by the project).

104. *Nutrition monitoring group.* The project will support the establishment of a nutrition monitoring taskforce in each of the five provinces. This activity is part of the capacity building of the actors responsible for the implementation of AFAP-2 in relation to nutrition, from up-stream to down-stream. The objective is to have a harmonized and well-coordinated approach to ensure a sustainable change in the project's approach to nutrition issues and to align it with all stakeholders' understanding of nutrition. This action will promote multisectoral coordination and the impregnation of nutrition activities as well as alignment with the National Strategy for Food and Nutrition Security (ENSAN), good monitoring and quantification of the contribution of AFAP-2 to the achievement of the objectives set out in this strategy.

I.4: CLIMATE AND ENVIRONMENT

105. The approach to building the climate change resilience of the target communities will be predominantly through the integration of climate change adaptation activities in the various sub-components and activities of AFAP2. The climate change risk analysis will be done once sites for infrastructure i.e. roads, ponds and markets have been identified. The risk analysis will include identification of any climate change risks in specific locations particularly climate related shocks such as droughts and floods. The risk identification will then be followed by the selection of appropriate climate change adaptation option applying the tools such as the Adaptation Framework. This needs to be done during the feasibility of the infrastructure development. It will be essential to build the capacities. The screening criteria and some initial adaptation options have been included in the Environment and Social Management Framework. During the operational phase the monitoring will then require specific attention to the effectiveness of the adaptation measures.

106. The approach to improving environmental and natural resources management will hinge on the building of capacities of the target communities. The capacity building of communities will enable the enhancement of the positive impacts on land and water resources management. Regarding the land, the siting of ponds will take into consideration the environmental sensitivity, the existing use of the land and access to it as well as tenure security where this applies by the communities. The screening criteria included in the ESCMF will have to be adhered to. The design and construction of the ponds will also incorporate measures to ensure minimal disturbances to the land. Materials excavated during the construction phase will be disposed of in appropriate locations and areas restored with regards to roads rehabilitation and construction of markets. The boundaries of the ponds will require stabilisation to minimise erosion. The road rehabilitation will include improved drainage to channel runoff away from the roads surface. The operational phases for the markets and kiosks will pay particular attention to waste management as part of the circular economy approach envisaged.

107. The availability of water resources is a key criterion in selection of the AFAP2 interventions for aquaculture and fisheries. The water quantity and quality are both important to assess during the site feasibility assessment. The fisheries activities are expected to improve the management of the lagoons. In the locations with cage culture, the siting of the cages will have to be informed by relevant studies to ensure preservation of natural habitats. In addition, capacity building for the communities will be necessary on

feeding practices that minimise any adverse impacts on the water bodies. In an effort to promote water use efficiency, the water drained from the ponds will be used to irrigate vegetable gardens in the vicinity of the ponds. The integrated livestock (fisheries and poultry) and crop systems will also provide benefits in resources use efficiency. The promotion of black soldier flies for the manufacture of fish feed will also have environmental benefits. The generic environmental management plan included in the ESCMF proposes indicators to be monitored to ensure the desired improvements.

I.5: INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

I.5.1: Project Management Unit (PMU)

108. Management of the AFAP-2 Project will largely follow the AFAP management arrangements with some modifications aimed at improving effectiveness and efficiency of implementation. The Project delivery systems will be integrated into the decentralised organisational structures that cascade from the national to communal levels. MINPERMAR will be the Project's lead agency and will delegate the implementation of the project to IPA to oversee the Project's implementation. IPA will recruit a PMU for the day-to-day management of the Project. The PMU will recruit a core team of experienced staff to manage and oversee AFAP-2 implementation. It will also have access to TA for some of the expertise that will be needed for effective Project implementation. Composition of the PMU is presented hereunder and the respective ToRs/JoDs of all the PMCU staff are presented in Annex 1:

- a) Project Manager;
- b) Finance Management Officer;
- c) Monitoring and Evaluation Officer;
- d) Knowledge Management Specialist;
- e) Procurement and Contracts Manager;
- f) Aquaculture Specialist;
- g) Fisheries Specialist;
- h) Business Development Specialist;
- i) Infrastructure Specialist (TA);
- j) Community Development and Social Inclusion Specialist;
- k) Internal Auditor (TA);
- l) Accountant;
- m) Procurement Assistant;
- n) Monitoring and Evaluation Assistant;
- o) Project Assistant;
- p) Driver (3)

109. At the Provincial level, AFAP-2 implementation will be coordinated by the IPA Representatives; they will serve as the AFAP-2 Provincial Coordinators. The IPA structures at the Provincial level will be strengthened, under subcomponent 3.1, to ensure that they have adequate capacity to implement the Project in accordance with the overall strategic priorities and contribute to the achievement of AFAP-2's development objective. Those structures will be responsible for the day-to-day coordination of the Project in the Provinces and their composition is presented hereunder while the respective ToRs/JoDs of all the staff are presented in the Annex:

- a) Provincial Coordinator;
- b) Office Assistant; and

c) Driver.

110. At the municipality level, there will not be any specific AFAP-2 management structures but initiation of all AFAP-2 activities will necessarily require consultation with the Municipality Administrators; this will be aimed at ensuring that Municipality Administrators are aware of AFAP-2's interventions in their communities and could be called upon for facilitation whenever considered necessary.

I.5.2: Project Governance Structures

111. **Project Steering Committee (PSC)** – A Project Steering Committee (PSC) will be established to provide oversight function to AFAP-2 implementation. PSCs at different levels play key roles for oversight and major decision-making. Steering Committees' key roles and functions across the different AFAP-2 levels will include:

- a) providing overall oversight and strategic guidance to AFAP-2 implementation;
- b) ensure that the Project contributes to the higher-level sector policy and strategic goals;
- c) ensure that the Project is moving in the right direction towards achievement of its development objective;
- d) review and approve the AWPBs submitted by the PMU;
- e) review and approve implementation performance progress reports prepared by the PMU and oversee the implementation of the corrective actions;
- f) updating respective senior management within their ministries on strategic and policy related issues of Project developments;
- g) facilitating strategic partnerships with high level senior stakeholders within the Government;
- h) ensure inter-ministerial coordination, harmonization and alignment with other programmes/projects and initiatives in the sector.

112. The MINPERMAR Minister will chair the PSC and the Project Manager will serve as the Committee's Secretary. The Committee will meet at least twice a year to review and approve the AWPBs and the implementation progress reports. It will comprise of high-level key officials from relevant line ministries, agencies and other relevant stakeholders. An indicative list of the PSC members is presented hereunder:

- a) Ministry of Public Works, Urbanism and Housing (MINOPUH);
- b) Ministry of Energy and Water (MINEA);
- c) Ministry of Culture and Tourism (MCTA);
- d) Ministry of Environment (MINAMB); and
- e) Ministry of Agriculture and Forestry (MINAGRIF)

113. **The Provincial Project Steering Committees (PPSCs)** – At the provincial level, a Provincial Project Steering Committee (PPSC) will be established in each participating province, chaired by the Provincial Governor. An indicative list of the PPSC members is presented hereunder:

- a) Provincial Director of Agriculture, Livestock and Fisheries Directorate;
- b) Provincial IPA representative;
- c) A representative of civil society or NGO;
- d) A representative of the private sector;
- e) At least two representatives of beneficiaries/producers' organisations; and
- f) Any other representative that may be deemed necessary in guiding AFAP-2's effective implementation.

I.5.3: Partnerships

114. AFAP-2 implementation will seek to coordinate and harmonize with the projects/programmes financed by IFAD, the Government of Angola and various development partners that support thematic areas related to its development objective. Essentially, the aim will be to take advantage of existent synergies and avoiding duplications. IFAD is currently supporting two ongoing projects in the country: a) the Smallholder Resilience Enhancement Project (SREP)⁵¹. AFAP-2's synergies with SREP could include: i) fish feed production using cereals produced by SREP; and ii) integration of aquaculture/fishing activities within SREP-supported beneficiaries to address nutrition aspects of the target population; and b) the SADCP - C&H)/SAMAP could provide important lessons and build synergies with AFAP-2 on strengthening capacity for rural enterprises. The list of potential partners for collaboration is presented below:

Partner	Project (existing or planned)	Potential areas of collaboration
<p>a) IFAD-Supported Projects</p> <ul style="list-style-type: none"> ✓ Smallholder Resilience Enhancement Project (SREP) ✓ Smallholder Agriculture Development and Commercialisation Project for the Provinces of Cuanza Sul and Huíla (SADCP - C&H)/SAMAP 	<p>✓ GoA is implementing two IFAD-funded projects in the agricultural sector: SREP and SAMAP.</p>	<p>The IFAD-funded projects were essential for drawing lessons for the AFAP-2 project design and implementation.</p> <ul style="list-style-type: none"> ✓ The Smallholder Resilience Enhancement Project (SREP) is being implemented in 7 provinces, 3 of which are targeted for AFAP-2. The provinces include Bengo, Cuanza Note and Uige. Synergies can be built in (i) fish feed production using cereals produced by smallholders supported under SREP. Furthermore, (ii) common market infrastructure constructed in the three provinces to contain agricultural produce and a section for fish, (iii) integration of aquaculture/fishing activities within SREP-supported beneficiaries to address nutrition aspects of the target population. ✓ The SADCP - C&H)/SAMAP could provide important lessons and build synergies with AFAP-2 on strengthening capacity for rural enterprises.
<p>b) Food and Agriculture Organisation (FAO) of the UN. FAO is the GoA key partner for agricultural, fisheries sector policy design and review, rural extension service capacity</p>	<p>ESCOMAR is in the pipeline (planned)</p>	<ul style="list-style-type: none"> ✓ FAO can partner with IFAD-funded projects in areas of policy, extension, producer organizations and rural commercialization. ✓ Another area of potential partnership is in fish

⁵¹SREP is being implemented in 7 provinces, 3 (Bengo, Cuanza Note and Uige) of which are targeted for AFAP-2.

strengthening, including the Farming Field School. c) ESCOMAR project focused on supporting women processors with training and basic infrastructure for fish processing.		processing and engagement of women to improve quality and value addition.
d) World Bank. (i) Angola Agricultural Transformation Project (MOSAP3) (ii) Angola Commercial Agriculture Project (PDAC), Supporting farmers through productive alliances to reach new markets and establish commercial relationships; Strengthening business practices and VC development through public-private dialogue to benefit agribusiness SMEs, including Partial Credit Guarantees	✓ The PDAC is an ongoing project covering Corridor (A): Luanda –Bengo – Malanje – Cuanza Norte, and Corridor (B): Luanda –Bengo – Huambo – Bié –Cuanza Sul – North of Huila.	✓ Synergies built between the World Bank-funded project and AFAP-2 through MOSAP3 activities, such as agro-climate information services in AFAP-2 provinces, implemented nationwide PDAC market linkages in Cuanza-Note and Malanje provinces.
e) World Food Programme	✓ The WFP is supporting ongoing IFAD-funded projects to implement nutrition interventions.	✓ Possible synergies between WFP and AFAP-2 can be built around the implementation of nutrition interventions, as AFAP-2 is considered a nutrition-sensitive project.
f) African Development Bank (AfDB) (i) Cabinda Province Agriculture Value Chains Development Project 2018 – 2026; (ii) Fisheries Sector Support Project 2013-2023 (extended); and (iii) Within the AfDB country strategy 2017 to 2021 (extended to 2023),	✓ The AfDB Cabinda Province Agriculture Value Chains Development Project is ongoing until 2026, while the Fisheries Sector Support Project 2013-2023 is completed.	✓ Synergies between the Cabinda Province Agriculture Value Chains Development Project and AFAP-2 could be built around knowledge sharing in the fisheries component and institutional engagement.
g) European Union (EU) The Blue Economy Pipeline project	✓ The EU is contemplating the implementation of a blue economy project with a strong focus on capacity building.	✓ Synergies with the EU are expected in co-financing AFAP-2 in areas of capacity building.
h) Government of Iceland	Government of Iceland has signed MoU with IFAD covering Technical Assistance on: i) sustainable fisheries; ii) renewable energy; iii) land restoration; iv) gender; and v) youth.	Potential TA with Iceland in areas of sustainable fisheries and renewable energy

PART II: DETAILED IMPLEMENTATION MODALITIES

II.1: START-UP

115. IPA will develop a workplan and the associated budget for preparatory activities and liaise with IFAD to organize a start-up workshop. Such preparatory activities could include:

Action	Who
a) Sign the financing agreement (following IFAD board approval)	GoA/IFAD
b) Establishment of the PMU and the Provincial Project Coordination Units.	GoA in consultation with IFAD
c) Open Designated Accounts and identify signatories (ID and signature specimen).	GoA
d) Sign MoUs/Memoranda of Cooperation between the national and provincial governments. The MoUs should specify the expected responsibilities and outcomes.	MoF/ MINPERMAR/participating Regions/Woredas
e) Review and finalise the first year AWPB and Procurement Plan	PMU
f) Review and finalise draft PIM	PMU
g) Establish the national Steering Committee and introduce the AFAP-2 Project to it. Agree on how to proceed with the provision of the oversight function (frequency and modality of meetings)	MINPERMAR
h) Establish the Project Steering Committees in the 5 participating provinces.	Provincial Governors.
i) Procurement and installation of an off the shelf accounting software at the PMU and the Provincial Project Coordination Units (PPCUs) and the chart of accounts coded to the detail possible	PMU/PPCUs
j) Hold the official AFAP-2 start-up workshop. This would be used to orient the PMU/PPCUs/other stakeholders.	MINPERMAR/Provinces
k) Initiate the undertaking of the AFAP-2 baseline survey	PMU/PPCUs
l) Initiate the process of undertaking a capacity and system's needs assessment to elaborate capacity building plan	PMU/Consultant
m) Conduct awareness creation on AFAP-2 objectives and implementation arrangements	PMU/PPCUs
n) Review and finalise the targeting strategy for the selection of municipalities and communes and specific beneficiary communities.	PMU/PPCUs/Municipalities/Communes/Community-Based Organisations (CBOs).

II.2: COMPONENT 1: SUSTAINABLE INLAND FISHERIES AND SMALL-SCALE AQUACULTURE PRODUCTION SYSTEMS

116. The component will focus on expanding AFAP's successful interventions and lessons in climate-resilient and nutrition-sensitive fisheries and aquaculture production strategies. The component will respond to Outcome 1 - *Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes*. This will involve the mobilization and capacity building of rural producers in targeted areas through enhanced access to technical and non-technical knowledge, skills, production assets and conducive policy environment for production and management of inland fisheries and small-scale aquaculture.

117. The component will contribute to achieving two outputs i.e., i) *Effective inland fisheries management system developed with strong community participation*, and ii) *Resilient business-oriented small-scale aquaculture production and distribution capacities*,

and extension services established. It will enhance capabilities of small-scale fish farmers, enabling them to boost production, and foster the development of resilient businesses within the aquaculture value chain, including non-fish farming stakeholders. In addition, it aims at enhancing nutrition results by promoting dietary diversity through integrated aquaculture-agriculture interventions. The projects outcome and output will be delivered in two subcomponents:

- Sustainable Inland Fisheries and Ecosystems, which will support the sustainable utilization of inland fisheries resources by rural riparian communities and conservation of biodiversity in selected lagoons and river ecosystems, to ensure their high productivity and long-term viability. It aims to enhance productivity in inland fisheries by replicating a tested and proven community-owned co-management system that promotes the sustainable utilization of fisheries resources, to increase food security and resilience of rural fishing communities, with a target to support 10,000 HHs. The key result areas for this subcomponent are: a) the establishment of an effective inland fisheries co-management system; and b) the sustainable utilization of inland fisheries resources for income and nutrition; and
- Resilient Business-Oriented Small-Scale Aquaculture Production, which will involve implementation and promotion of sustainable aquaculture technologies, innovations and management practices that are climate smart, nutrition-sensitive and resource-use efficient. The key result areas for this subcomponent will include and-based pond and cage aquaculture systems and associated integrated production interventions to address nutritional diversity, with a target of 10,000.

II.2.1: Subcomponent 1.1: Sustainable Utilization of Inland Fisheries and Conservation of Lagoon Ecosystem

118. The subcomponent contributes to achieving Output 1.1: Effective inland fisheries management system, participative climate and rural community development processes established. The following activities are planned: a) community mobilization and social development for small-scale fisheries; b) Establishment and/or strengthening of Community Council of Fishers (CCPs); c) Establishment of effective inland fisheries surveillance system; d) Development of a participatory inland fisheries data and monitoring system; e) development of inland Lagoon Management Plans (LMPs); and f) Enhanced community access to inland fisheries for nutrition and incomes.

119. The sustainability of inland fisheries and ecosystems necessitates an ecosystem approach encompassing ecological, social, and economic considerations. The project will commence with thorough assessments of inland fisheries and associated ecosystems, including riverine environments and lagoons. This entails gathering data on fish populations, habitat quality, water flow, and overall ecosystem health, enabling the identification of potential threats to sustainability. Subsequently, strategies will be developed to address these threats and foster sustainable management practices, which may include the implementation of regulations and policies, engaging stakeholders such as regional and local government officers, fishermen and indigenous communities, who possess invaluable insights into their ecosystems, promotion of sustainable and responsible fishing techniques. Additionally, educational campaigns and capacity building endeavors will play a crucial role in raising awareness about the significance of sustainable fishing practices and fostering adherence to regulatory frameworks.

Expected results

120. The subcomponent will contribute to achieving effective inland fisheries management system, participative climate and rural community development processes established, with the following expected results:

- ✓ Establish fifty (50) new CCPs in 25 Lagoons across the five Provinces

- ✓ Establish a minimum of 10 'Riverpool' systems along riverine ecosystems
- ✓ Develop an effective inland fisheries monitoring, control and surveillance (MCS) system
- ✓ Develop one (1) national Lagoon Management Plan (LMP)

121. During the preparatory stage, the project will undertake the following steps, which correspond to the fisheries co-management inception, planning, and implementation stages: i) Screening target communes for co-management support, ii) Assessing co-management feasibility in potential target communes, iii) Deciding on the target communes for lagoon co-management, iv) Checking the initial status of CCPs in selected communes, v) Training the project technical staff and vi) Familiarizing with the lagoon environment and fisheries through:

- ✓ Surveying lagoon environment factors such as water and sediment qualities.
- ✓ Assessing the status of lagoon capture fisheries through mapping fixed fishing gear, etc.
- ✓ Evaluating lagoon aquaculture through mapping ponds, etc.
- ✓ Conducting other relevant surveys and studies on lagoon environment and fisheries.

Implementation of detailed Interventions

122. *Activity 1: Community mobilization and social development for small-scale fisheries*; the task plays a pivotal role in the sustainable management and growth of small-scale fisheries. These interconnected processes are crucial for fostering resilient and empowered fishing communities, addressing socio-economic challenges, and ensuring the long-term viability of small-scale fisheries resources they depend on. This task will be done by a consultant within a duration of first 6 months of the project inception according the TOR in Annex 2. The process of activity implementation will be as follows:

Specific activities	Responsibility	Duration
Mobilizing all households in targeted villages to participate in the project, clarifying objectives, access criteria & implementation modalities, Encouraging stakeholder participation, Inspiring & creating determination among the target population.	Community facilitator	4 months
Targeting and formation of CIGs in selected communities: Generating baseline data on the community; identifying, prioritizing & planning for community needs; identifying existing resources & resource gaps; preparing community action plans; selection of beneficiaries and formation of CIGs through wellbeing ranking, public vetting		
Identification of livelihood activities within the inland fisheries sector– Undertake GALS and Climate change analyses and preparation of livelihood business plan by CIGs: Orientation about livelihood activity menu and viability of livelihood activities, Selection of livelihood activity by the CIGs		

123. *Activity 2: Establishment and/or strengthening of Community Council of Fishers (CCPs)*; Establishing CCPs is a crucial step in the sustainable management of fisheries resources, as they play a key role in involving local communities in the decision-making processes and ensuring the responsible and sustainable use of the fisheries resources. Based on the experience of AFAP, new CCPs will be established and existing ones strengthen using procedures adopted from FAO⁵².

⁵²Takahashi, B. & van Duijn, A. P. 2012. Operationalizing fisheries co-management: Lessons learned from lagoon fisheries co-management in Thua Thien Hue Province, Viet Nam. FAO Regional Office for Asia and the Pacific, Bangkok. RAP Publication 2012/02, 131 pp

Stepwise establishment of new, and strengthening of existing CCPs

124. The general steps that need to be taken to establish and/or strengthen local CCPs are detailed in Annexes 2. These steps are divided into workshop-type meetings and preparatory work. The workshop-type meetings will generally focus on larger groups and have a clearly defined structure and outputs. Preparatory work is done mainly by smaller groups that may frequently change composition. Based on local circumstances, the number of key meetings as well as the contents of the meetings may vary. The meetings can be generally divided into four types of workshop-type meetings, namely: i) Community kick-off workshops; ii) CCP mobilization meetings; iii) CCP strengthening meetings; and iv) CCP introduction ceremonies. Each of the meetings will have own objectives.

125. *Community kick-off workshops* - Following the selection of the target communes, a kick-off workshop will be conducted in each of the provinces. The objectives of these workshops will be to :

- ✓ raise awareness on the status of the lagoon resources, local CCPs, and fisheries co- management;
- ✓ raise awareness on the need for and benefits of improved management of lagoon resources
- ✓ define the number and type of local CCPs to be established and/or strengthened with project support;
- ✓ discuss and tentatively define the community water surface area belonging to each local CCP; and
- ✓ discuss the process of building the co-management model.

126. *CCP mobilization meetings* - Following the kick-off workshop at the community level, a mobilization meeting will be held at the CCP level. Besides raising awareness and fisher folk mobilization, the focus will be on developing a set of rules to govern the internal management of the CCPs (i.e. bylaws), providing the young CCPs with a tailor-made organizational structure (e.g. executive board, subgroups, and subgroup leaders) and taking the steps necessary for formal establishment and legal recognition as a socio-professional organization. In general, the objectives of the mobilization meetings will be to:

- ✓ raise awareness on the status of lagoon resources, local CCPs, and fisheries co- management;
- ✓ introduce concepts of sustainable natural resources management;
- ✓ introduce concepts of climate change risks, impacts and management;
- ✓ mobilize local fisher folk to participate in the CCP and register as a member;
- ✓ elect a provisional executive board;
- ✓ discuss and declare intent to develop the CCP (e.g. membership and structure including subgroups); and
- ✓ tentatively name the CCP.

127. *CCP strengthening meetings* - If a CCP(s) had already existed, or following the mobilization meetings of new CCPs, the project will strengthen the CCPs. The main objectives of CCPs strengthening meetings will be to:

- ✓ raise awareness on the status of the lagoon resources, local CCPs, and fisheries co- management;
- ✓ contextualise sustainable lagoon resources management;
- ✓ contextualise climate change risks, impacts and management for the lagoons;
- ✓
- ✓ consolidate and strengthen organizational structure (e.g. subgroups, subgroup

- leaders, subgroup members, and subgroup areas if applicable);
- ✓ discuss local CCP charter and management regulations; and
- ✓ discuss the tentative work plan for developing the local CCP.

128. *CCP introduction ceremonies* - The introduction ceremony will come at the end of the preparation for the formal establishment of a CCP. By this time, all necessary documentation such as charters (bylaws), management boards, subgroups, and member list should be ready and submitted to the Municipal and Provincial office for the issuance of the official decision on the CCP establishment.

129. *Determining the appropriate size of a CCP* – The fundamental guideline for establishing the size of a CCP is to strike a balance: it should be "sufficiently large to yield effectiveness, yet manageable." A CCP needs to encompass a substantial water surface area and a significant number of resource users to ensure its management efforts are impactful. Nonetheless, it must also remain manageable in terms of organizational size. The factors listed in the table can be considered when determining the size of CCP.

Table: Factors to be considered when determining the appropriate size of a CCP

Factors	Description
Existing social structure	The majority of the CCPs in the project's target communes will be established on the basis of existing structures of village(s) or commune(s), in which people more or less know each other already.
Social cohesion	Social cohesion within a group holds significant importance and serves as a crucial factor to consider when establishing CCPs. In settings where social cohesion is robust, such as in tight-knit traditional villages, individuals are more inclined to adhere to group rules due to the considerable repercussions of non-compliance, such as expulsion from the community. Facilitators tasked with determining the suitable size of the CCP should thoroughly examine this aspect.
Time-distance	Time-distance also limits the size of local CCPs as FAs need to organize frequent meetings. If the people live far apart, it is difficult to have frequent meetings. Time-distance is not merely the physical distance, but also depends on modes of transportation that CCP members usually use.
Fishery structure	How fisheries are organized could be an important determining factor for other types of CCP. As mentioned earlier, to be "large enough to be effective," a proper understanding of how fisheries are undertaken by local fishers, including their geographic extent, mobility, and origins (where the fishing boats are from) is quite critical.
Activities	If a group of people using the same water surface is deemed too large to manage, another way of dividing the group is by their profession, or their main activity. A typical division would be capture fisheries and aquaculture, but it can be a single activity such as stake trap or fish cage culture, if the number of people engaged in such activities is significant.

Leadership	Leadership is an important factor in determining the CCP size. If there is a trusted, visionary leader among the fishers, the group size can be relatively big. If the leadership is weaker it is better to keep the size of the group relatively small. One drawback of having a strong, charismatic leader is that he or she is more likely to prevent the development of other management members (future leaders), which is not positive for the continuity of the organization.
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130. *Activity 3: Establishment of effective inland fisheries monitoring, control and surveillance system (MCS)*, which includes a participatory inland fisheries data and monitoring system. To establish the surveillance system, the project will conduct training and capacity building to enhance the capabilities of CCPs and community members in sustainable inland fisheries and ecosystem management strategies, regulations, community group dynamics, and conflict resolution mechanisms. The process of activity implementation will be based on intensive training of the CCPs and local fisher folk. The training will be done by the fisheries specialist in the PMU in consultation with IPA and GEPE, for 5 months according to TORs in Annex 3.

131. *Training module for CCPs*: the training will cover the following topics: i) Overview of the importance of sustainable fisheries, including economic, environmental and social significance, ii) Role of CCPs in Fisheries Management, including purpose and key responsibilities, understanding fisheries ecosystems such as fish species and their characteristics, importance of maintaining balance in fish populations and threats to fisheries ecosystems, iii) National legal framework and regulations governing inland fisheries ecosystems, licensing and permits, iv) Data collection and monitoring; i.e., importance of accurate data, methods of data collection (e.g., surveys, logbooks), monitoring and surveillance techniques, identifying and addressing illegal, unreported, and unregulated (IUU) fishing, v) Sustainable fishing practices i.e., selective fishing gear, bycatch reduction techniques, fishing seasons and closures (importance of temporary closures for spawning and breeding periods), vi) Conservation and habitat protection., i.e., ecosystem-based fisheries management, integrating ecosystem health into fisheries management, protecting critical habitats such as breeding areas, vii) Community engagement and social aspects, i.e., importance of stakeholder participation, balancing economic development with conservation, and addressing social issues related to fisheries, viii) Capacity building and training: building technical skills in fisheries management and enhancing leadership and communication skills; and ix) Climate change risk management incorporating the identification of climate change risk, impacts and adaptation options.

132. *Activity 4 : Development of a participatory inland fisheries data and monitoring system* is a key output of the MCS intervention, playing a pivotal role in ensuring sustainability, regulatory compliance, and resilience in the management of inland fisheries. The content of the training will include strategies for stakeholder engagement, data collection, processing and management, decision support and adaptive management, and capacity building and empowerment. This training will be done by a competitively sort fisheries specialist, guided by the TOR in Annex 4.

133. *Activity 5: Development of Lagoon Management Plan (LMP)*; for protecting fisheries and ecosystem biodiversity supporting sustainable fisheries, managing water quality, adapting to climate change, promoting tourism and recreation, and preserving cultural and heritage values. By integrating ecological, social, and economic considerations, such a plan ensures the long-term health and resilience of lagoon ecosystems for the benefit of both present and future generations.

134. Key deliverables for the LMP will be i) Ecological Assessment Report, including water quality analysis, biodiversity inventory, and habitat mapping, ii) Socio-economic Assessment Report, detailing the impact of various activities on the lagoon and its surrounding communities, including suitability for cage aquaculture iii) CAS and Frame

survey report, iv) Participatory Consultation and Stakeholder Engagement Report, v) strategies for conservation, restoration, and sustainable use. This task will be done by a fisheries consultant/TA based on the TORs in Annex 5.

135. *Activity 6: Enhanced community access to inland fisheries for nutrition and incomes, through establishment of 'Riverpools'* - IPA will select 10 (with the option to increase to 20 based on demand) of appropriate riverine ecosystems capable of supporting 'river pool' technology, adhering to the criteria outlined below: Selecting an appropriate 'riverpool' technology involves a comprehensive consideration of various factors to ensure efficient and effective water management. 'Riverpools' are small-scale water harvesting structures specifically designed to impound river water, facilitating the trapping and accumulation of fish for easy harvesting by the local community.

136. The criteria for selecting suitable 'riverpool' sites include; i) careful evaluation of topography (slope) and land characteristics (soil type) to determine the suitability of the area for 'riverpool' construction. Priority should be given to areas with high water retention capacity. ii) Hydrological conditions, such as rainfall patterns, river velocity, and runoff characteristics (flooding), must be assessed in the region to estimate the potential water harvesting capacity of the 'riverpool'. Areas with low water velocity and infrequent flooding events are preferable for consideration. Additionally, fish diversity and abundance play a crucial role, necessitating the utilization of citizen science and indigenous knowledge to identify areas within the riverine ecosystem with higher fish diversity and abundance. iii) Involving local communities in the planning and implementation process is essential to ensure that the 'riverpool' technology aligns with the needs and preferences of the users. This involves considering social dynamics, traditions, and local knowledge during the design and construction phases. Preference should be given to communities who are already practicing the technology. vi) Health and safety considerations are paramount, and measures should be implemented to prevent 'riverpools' from becoming breeding grounds for waterborne diseases or posing risks of drowning. Compliance with legal and regulatory standards is imperative to ensure the 'riverpool' technology meets established norms.

Table 2: Procedures for establishing new, and strengthening existing CCPs

<i>Steps</i>	<i>Meeting</i>	<i>Desired participants</i>	<i>Content</i>	<i>Documents</i>	<i>Expected outcome</i>	<i>Note</i>
I	Community authorities	<ul style="list-style-type: none"> - Community leaders and agencies Women's Union, Farmer's Union, commune police, Youth Union, village leaders) - Government representatives 	<ul style="list-style-type: none"> - Brief the commune on CCP and co-management. - Discussion on work to be done to strengthen and/or establish one or more CCPs in the community 	<ul style="list-style-type: none"> - regulation on management of lagoon fisheries activities - regulation on management of centralized aquaculture areas 	<ul style="list-style-type: none"> agreement on [village/ group name] selected for support on CCP establishment - One official appointed as local resource person 	Half day
<p>Preparatory work 1: Make available the leaflets prepared on CCP and co-management, membership application form to persons participating in activity II prior to the activity. Request them to provide issues of concern, if any, related to provided documents prior to activity II. Allow reasonable time for them to prepare. Send the technical staff to collect the written issues of concern prior to activity II. Request participants to raise issues of concern at the meeting if not submitted previously.</p>						
II	Village or professional group	<ul style="list-style-type: none"> - Village leader - Production unit representative, self-management group / team representative - community resource person - Key fishers (well-known or enthusiastic individuals) 	<ul style="list-style-type: none"> - Discussions with the participants on the issues arising from the documents provided. 	<ul style="list-style-type: none"> - Draft charter for local CCP -Draft membership application form - Draft leaflet on CCP and co-management 	<ul style="list-style-type: none"> - Raised awareness on CCP and co-management - Agreed CCP charter - Agreed membership application form - List of provisional management board members & tasks assigned - Initiation of obtaining membership 	One day
<p>Preparatory work 2: Prepare final draft of CCP charter, lists of CCP members & management board (MB) members and include in the report of outcomes activity II for dissemination. Provide stipulated existing relevant regulations (e.g. stipulated fishing gear regulations, environmental regulations, aquaculture siting regulations & other relevant regulations) for participants prior to activity VI.</p>						
III	Village or professional group	<ul style="list-style-type: none"> - Provisional management board - Village leaders 	<ul style="list-style-type: none"> Identification of management objectives and management rules 	<ul style="list-style-type: none"> - Stipulated fishing gear regulations, environmental 	<ul style="list-style-type: none"> -Identified management objectives and 	One day

		<ul style="list-style-type: none"> - community representative/s - Provincial official - Department of Fisheries officers - Existing management groups, 	together with information required for CCP to implement management rules	regulations, aquaculture siting regulations & other relevant regulations	regulations - Identified information needs to implement management regulations	
Preparatory work 3: Make arrangements to confirm establishment of CCP and its provisional MB, announcement of the decision to establish CCP & permission certificate and stamp issued by authorities through one-on-one meetings and pre-arrangements for the ceremony to commencement of CCP functioning						
IV	CCP introduction ceremony	<ul style="list-style-type: none"> - Community leaders and agencies (Commune Front, Women’s Union, Farmer’s Union, commune police, Youth Union, village leaders) - Provincial representative - Official members of the local CCP 	Local CCP introduction ceremony and commencement of its activities	<ul style="list-style-type: none"> - Decision of local CCP establishment and its provisional MB - Local CCP permission certificate and stamp issued by authority 	- Public reading of decision of local CCP establishment	Half day
V	Village leader, Provisional MB	<ul style="list-style-type: none"> - Village leader - Provisional MB - Community resource person - Provincial representative and Fisheries officers 	- Build CCP financial plan		- Financial plan for CCP	Half day
VI	CCP meeting	<ul style="list-style-type: none"> - Village leader - Provisional MB - CCP members 	<ul style="list-style-type: none"> - Fine tuning the following: - local CCP charter - financial plan - management objectives and management regulations 	Documents generated from previous activities related to: <ul style="list-style-type: none"> - local CCP charter - financial plan - management objectives and management regulations 	Adjusted and / or fine-tuned versions for approval	Half day

VII	FA congress	<ul style="list-style-type: none"> - People’s Council - Community Front - Farmer’s Union - Women’s Union - Commune police - Youth Union - CCP representative 	<ul style="list-style-type: none"> - Report on CCP operation and work plan for the term by the CCP chairperson - Local CCP charter - Management regulations - Elect new MB - Elect CCP checking body 	Documents generated from activity VI	<ul style="list-style-type: none"> - Approved CCP charter - Approved management objectives & regulations - Elected new MB - Elected CCP checking body 	One day
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II.2.2: Subcomponent 1.2: Enhancing Resilient Business-Oriented Small-Scale Aquaculture Production

137. This subcomponent will involve implementation and promotion of sustainable aquaculture technologies, innovations and management practices that are climate smart, nutrition-sensitive and resource-use efficient. The subcomponent contributes to *Output 1.2: Resilient business-oriented small-scale aquaculture production and distribution capacities, and extension services established*. It will enhance capabilities of small-scale fish farmers, enabling them to boost production, and foster the development of resilient businesses within the aquaculture value chain, including non-fish farming stakeholders. Additionally, it aims to enhance nutrition results by promoting dietary diversity through integrated aquaculture-agriculture interventions.

138. The activities will comprise: a) community mobilization and social development for resilient aquaculture, b) Identifying and mapping areas suitable for aquaculture; c) Constructing fish ponds and pilot cages, d) Establishing integrated aquaculture systems, including kitchen gardens, fish-duck farming, and carbonized pond technology (CPT), aimed at enhancing productivity and dietary diversity, e) enhancing capacity in aquaculture technologies and management practices to promote nutritionally-rich and climate-resilient aquaculture production

139. For achieving sustainability, pond and cage aquaculture units will be situated in appropriate locations, taking into account factors like water quality, accessibility, and environmental impact. Thorough assessments will be conducted to ensure minimal disruption to local ecosystems and communities. The project will prioritize intensive trainings/capacity building and adoption of sustainable farming practices, including proper waste management to prevent pollution, regular monitoring of water quality, integration of production systems, and responsible feed management to minimize nutrient runoff and maintain ecological balance. Engaging with local stakeholders, such as government agencies, environmental organizations, and community members, will be crucial to foster collaboration and address concerns regarding the aquaculture operations. The production sector will be linked to component two for business and entrepreneurial development to ensure economic sustainability.

Expected results

140. The subcomponent contributes to Output 1.2: Resilient business-oriented small-scale aquaculture production and distribution capacities, and extension services established, with the following expected results:

- ✓ 6000 fish ponds across the 5 provinces
- ✓ 250 fish cages (50 cages per Province) piloted across the 5 provinces
- ✓ 120 Nutriponds across the 5 provinces (i.e., one nutripond for every 50 ponds)
- ✓ 120 kitchen gardens (i.e., one vegetable garden for every group of 50 ponds), with a possibility of replication in individual owned farms
- ✓ Established and functional integrated fish-duck culture systems

Implementation of detailed Interventions

141. *Activity 1. Community mobilization and social development for resilient aquaculture*; The objective is to i) mobilize and empower local communities for active participation in resilient aquaculture practices, ii) Facilitate the development of social infrastructure that supports sustainable aquaculture initiatives, iii) Strengthen community capacities to adapt to climate change impacts on aquaculture, iv) Foster community-led initiatives for inclusive and equitable development in the aquaculture sector. This involves actively engaging and

empowering local communities to participate in sustainable aquaculture practices, aiming to enhance the socio-economic well-being of the community. The task will be done by a competitively contracted community development expert in the project (TOR Annex 6). The process of activity implementation will be done as follows:

Specific activities	Responsibility	Duration
Conducting a comprehensive community assessment to identify key stakeholders, local dynamics, and existing aquaculture practices.	Community facilitator	5 months
Designing and implementing community mobilization strategies to raise awareness and build support for resilient aquaculture.,		
Facilitating the establishment of community-based organizations or cooperatives to promote collective action in the aquaculture sector		
Collaborating with local authorities and stakeholders to integrate social development principles into aquaculture policies and practices,		
2. Conducting regular follow-ups and evaluations to assess the impact of community mobilization efforts and identify areas for improvement.		

143. *Activity 2: Identification and mapping aquaculture suitability areas;* Forecasts indicate that national demand for fish products in Angola will continue to increase over the next decades, driven predominately by rising populations and urbanization⁵³. This justifies the need to identify and map aquaculture resources, for proper management and future planning. These resources include lagoons, rivers, reservoirs, dams, ponds, canals, irrigation canals, swamps and small, seasonal, inland floodplains, as they hold the future of small holder aquaculture development in the rural economies. The objective is to identify and map the areas that have the potential for the development of aquaculture in the AFAP-2 selected Provinces. The activity will build on the work conducted by the National Directorate of Aquaculture which conducted some preliminary studies to identify and map aquaculture potential areas. The project will assess where such reports can be updated or if there will be need for new assessments. The PMU will competitively contract a TA (Aquaculture Expert) to update the existing aquaculture suitability mapping in accordance with the ToRs included in the PIM, (Annex 7).

144. *Activity 3 : Fish pond construction* – Construction of ponds is a pivotal aspect of aquaculture, exerting a significant influence on the prosperity and sustainability of fish farming. As part of this initiative, a total of 6000 community ponds (each 500m²) are envisioned to be constructed, totalling 50 ponds per community with an additional one 'Nutripond' per community. This will be done by the aquaculture specialist in the project.

145. Essential criteria for the pond construction process encompass the following:

- a) the selection of a site with suitable topography and soil conditions is crucial. Optimal preferences lean toward flat or gently sloping terrains. A comprehensive soil analysis should be conducted to ascertain adequate clay content, ensuring proficient pond sealing and effective water retention.

⁵³Situational Analysis of Inland Fisheries and Small-Scale Aquaculture in the Republic of Angola 2023.

- b) it is imperative to choose a location with access to a reliable and sustainable water source, ensuring a consistent supply for pond filling and maintenance. Concurrently, a thorough assessment of water quality must be performed to guarantee it aligns with the prerequisites for fish culture.
- c) In terms of design, the construction of rectangular ponds with dimensions of 500m² is recommended. These ponds should feature well-designed structures for efficient water inlet and outlet, facilitating water level management and exchange. Considerations should include factors such as water exchange dynamics, feeding practices, and overall ease of pond management.
- d) the implementation of proper drainage systems is vital to prevent waterlogging and maintain optimal pond conditions. This ensures a conducive environment for the thriving of aquaculture.
- e) An evaluation of the environmental impact of pond construction is essential, taking into account factors such as proximity to natural habitats, wetlands, and protected areas. Measures should be implemented to minimize the ecological footprint, thereby promoting sustainable aquaculture practices.
- f) Local climate conditions, encompassing temperature fluctuations, rainfall patterns, and potential extreme weather events, must be considered in the pond design. Ponds should be designed to withstand seasonal variations, providing protection for fish from adverse weather conditions.
- g) Accessibility for pond construction equipment and transportation of materials is another critical consideration. Adequate infrastructure planning, including roads, electricity, and storage facilities, is imperative to support aquaculture operations effectively.
- h) Security measures are indispensable to safeguard the pond from unauthorized access and potential theft. Prioritizing safety features such as fencing and warning signs is essential to prevent accidents and ensure the well-being of workers and visitors.
- i) Adherence to local and national regulations and permits related to pond construction and aquaculture activities is a non-negotiable requirement. Obtaining necessary approvals and following established guidelines is imperative to ensure legal compliance.
- j) community involvement in the planning process is vital. Considering local perspectives and addressing potential social impacts is crucial. Establishing transparent communication channels fosters community support and minimizes conflicts, thereby enhancing the overall success and sustainability of the aquaculture initiative.

146. *Activity 4 : Construction of fish cages* - The project envisage to construct 250 cages across the 5 Provinces. This task will be done by the aquaculture specialist in the project. The specification and site location of cages is described as follows :

- a) Choose materials that are durable, non-toxic, and resistant to corrosion. Common materials include high-density polyethylene (HDPE), galvanized steel, or aluminum. Ensure the selected materials are suitable for prolonged submersion in water and can withstand environmental conditions.
- b) Design cages with a sturdy and well-engineered structure that provides sufficient strength to withstand water currents, waves, and potential stress from fish movements. Most cages should be 2x2x2 in dimensions (8m³), with a possibility of having few (5x5x3 – 75m³) depending on the suitability assessment of the lagoons to hold the bigger cages.
- c) Consider modular designs that allow for scalability and easy expansion of the fish cage system.

- d) Incorporate buoyancy elements to ensure the fish cages stay afloat. Buoyancy materials such as foam-filled floats or HDPE pipes, or empty 20L jericans for 2x2x2 or 100L jericans for 5x5x3 cages. Calculate and distribute buoyancy evenly to maintain stability and prevent tilting.
- e) Each cage will be anchored properly using appropriate weight of concrete works, firmly held using durable ropes.
- f) Consider premium-quality mesh with a size of 1cm, allowing proper water circulation and preventing fish escape. Choose eco-friendly materials and coatings that have no adverse effects on the aquatic ecosystem. Utilize materials resistant to fouling and biofouling to minimize maintenance requirements. Select materials and coatings that withstand degradation from UV exposure, and other environmental factors. Emphasize durability to guarantee an extended lifespan for the fish cages and decrease the need for frequent replacements.
- g) Implement measures to protect fish from predators, such as birds and larger aquatic species. Use predator nets or bird netting to minimize the risk of predation. Consider the environmental impact of fish cage fabrication. Minimize the use of materials that can leach harmful substances into the water.
- h) Take into account the positioning and spacing of cages to avoid creating 'dead' zones with inadequate water exchange. The placement and orientation of the cages, influenced by factors such as depth and wind patterns in the lagoon, should facilitate optimal water circulation within the cage. This is essential for preserving water quality, sustaining oxygen levels, and facilitating efficient waste removal. Typically, the cage net should be elevated at least 2 meters above the lagoon bottom.
- i) Ensure that fish cage fabrication adheres to local and national regulations and standards. Obtain necessary permits and approvals for the installation and operation of fish cages.
- j) Provide clear signage and markings for safe navigation around the fish cage area.

147. *Activity 5 : Establishment of conical kitchen gardens :*

- a) Choose a location with adequate sunlight exposure, preferably receiving at least 6-8 hours of sunlight daily. Assess soil quality and fertility, selecting well-draining soil with good nutrient content;
- b) Consider an appropriate conical garden design, considering factors like size, height, and spacing between individual cones. Ensure that the design allows for easy access, planting, and harvesting of vegetables.
- c) Choose resilient and weather-resistant materials for building the conical garden to ensure its lasting durability. Prioritize materials that are non-toxic and safe for cultivating vegetables; recycled options like old vehicle tires can be considered.
- d) Implement an efficient watering system that provides adequate moisture to all parts of the conical garden.
- e) Choose vegetables suitable for vertical gardening and conical structures; Consider the growth habits, sunlight requirements, and compatibility of selected vegetables.
- f) Prepare the soil with organic matter to enhance fertility and water retention. Ensure proper aeration and drainage to prevent waterlogging. Consider organic fertilizers or slow-release fertilizers for sustainable nutrient supply.
- g) Implement pest control measures to prevent infestations and diseases. Regularly inspect plants for signs of pests or diseases and take prompt action.

- h) Develop proper harvesting techniques to avoid damage to plants and maximize vegetable yield. Harvest vegetables at the appropriate stage of maturity to ensure quality.
- i) Consider the aesthetics of the conical garden, ensuring it complements its surroundings. Integrate the conical garden into the overall landscape or garden design for a cohesive look.
- j) Develop a maintenance plan that includes regular pruning, weeding, and monitoring of the conical garden. Schedule periodic inspections and maintenance tasks to ensure the long-term health of the vegetables.

148. *Activity 6: Preparation and introduction of carbonized pond technology (CPT) will adhere to the following guidelines:*

- a) The objective of the CPT is to boost the productivity of biological ponds through self-regenerating mechanisms. The idea involves elevating the carbon content in the pond water to foster the creation of billions of bacteria cells, forming bioflocs that serve as an alternative nutritious diet for fish. Utilizing cassava, abundantly accessible in local villages, as a carbon source is proposed in this approach. To prevent any competition with human consumption, cassava peels will be employed in the design.
- b) For each production cycle, a 500m² pond would need approximately 10kg of cassava peels. These peels are enclosed in a gunny bag, securely tied, and positioned at the inlet section of the pond. As the cassava peels undergo degradation, carbon is progressively released into the pond and dispersed by the water currents. The nitrogen content derived from uneaten fish feeds and fish feces provides the bacteria with an ample carbon-nitrogen ratio (C/N), allowing them to proliferate into billions of cells, ultimately forming bioflocs that serve as an additional diet for the fish.
- c) The frequency of replacing cassava peels will be determined by the level of degradation in the pond, typically influenced by factors such as water temperature and wind currents.

149. *Activity 7: The training module for Aquaculture Field School (AFS);* Aquaculture Field School (AFS) is an *unconventional* institution aimed at enhancing the decision-making capabilities of local fish farmers. Operating as a participatory extension approach, AFS empowers fish farmers to actively engage in the decision-making process concerning aquaculture production methods through a discovery-based approach⁵⁴. The AFS concept, built upon Participatory Technology Development (PTD), offers fish farmers the opportunity to experiment with novel approaches. By facilitating a platform for farmers to explore innovative methods, AFS becomes a conduit for learning and transferring new technologies. It plays a pivotal role in promoting best practices across various facets of aquaculture, including site selection, seed production, feed management, fish disease and biosecurity, water management, harvesting, value addition, marketing, record keeping, business planning, climate change risk management and financial management. In essence, AFS serves as an inclusive and dynamic space where fish farmers can actively contribute to and benefit from advancements in aquaculture. The key strengths of the AFS approach can be broadly categorized as i) enhancement of human and social capital as a key entry point for new practices and technologies, ii) grounds for new, meaningful and participatory learning about the scientific practices in aquaculture. Farmers' practical problems are regularly being analyzed, their capacity enhanced and qualitative decision-making ability strengthened.

⁵⁴ FAO (2002). FAO and the CWP have formulated a working definition of aquaculture. Retrieved from <http://www.fao.org/fishery/cwp/handbook/J/en>

150. Specific Objectives

- ✓ To empower farmers with knowledge and skills to make them experts in their fields.
- ✓ To sharpen the fish farmers' ability to make critical and informed decisions that render their farming profitable and sustainable.
- ✓ To sensitize farmers in new ways of thinking and problem solving by making farmers aware of their agro-ecosystem.
- ✓ To help farmers learn how to organize themselves and their communities (building social networks of experience)
- ✓ To build farmers' capacity to analyze production practices, identify main production constraints and to test and adopt solutions through farmer-led participatory research;
- ✓ To promote learning through exchange of experiences and knowledge among farmers (indigenous local knowledge) and specialists.
- ✓ To include farmers in decision making regarding the generation of agricultural practices and technologies.

151. Criteria for developing AFS

- a) Establish contact with the community: Initial contact with the community is needed to understand the area and characterize the livelihood systems. In most places, community leaders should be contacted first to seek their advice and authorization. Following their approval, facilitators can plan an awareness-raising meeting to introduce the AFS approach to the community.
- b) The awareness-raising meeting: A meeting with the community to introduce the AFS concept is necessary in areas where awareness is low following a participatory appraisal process. The facilitator needs to ensure that community members have a clear understanding of what they can expect from the AFS. Repeat the process if expectations do not match the AFS concept. Participants and the facilitator can then discuss how to move forward to plan the AFS implementation
- c) Identification of participants: Through consultations with the community and the help of local leaders, 30–40 AFS participants should be identified. In the identification process the facilitator needs to be aware of gender relations and cultural practices within the community. Ideally the group should include a mix of men, women, youth and elders from a cluster of villages. Identification of participants should follow the criteria below:
 - ✓ Common interest (i.e., all members have the same enterprise interest – fish production).
 - ✓ The enterprise is the main source of livelihood.
 - ✓ The participant is a decision maker in his or her household.
 - ✓ All participants are from the same socio-economic level, since the learning process can be hampered by influential personalities such as local chiefs who may impose their views and impede participation.
 - ✓ All participants should live within a relatively short distance of the AFS learning site, preferably the same village.
 - ✓ There are no known conflicts between participants.
 - ✓ The participant must aim to attend all sessions during the AFS cycle.
 - ✓ The participant must be willing to work in a team and share ideas with others, including non-members.
 - ✓ The participant must be willing to contribute financially, in material inputs or in personal time to the AFS works. The participant must be interested in learning and not expect material benefits.

- ✓ At least one participant must be willing to provide a herd, animal or field for group learning and experimentation
- d) Identifying the focal activity (AFS learning enterprise): Sufficient time should be spent on identifying the focus of the AFS, to avoid involving farmers in activities that are not of interest to them. The selection of the AFS enterprise depends entirely on local peoples' needs and interest. It is therefore important during the initial stage for the facilitator to help in analyzing the community, identify the components of its livelihood system and whether they have problems concerning this system.
- e) Identification of learning site: The AFS group will select a site to conduct meetings. A field and/or culture system is also needed as a study object. Criteria for learning site selection are:
 - ✓ The site should be relevant or suitable for the enterprise
 - ✓ Should be closer to a good source of adequate quality water and other sanitation facilities
 - ✓ It must be representative of the problems in the area
 - ✓ It must be central and accessible to group members and facilitators
 - ✓ It should be democratically selected by the group members
 - ✓ Closeness to homestead or secure place
 - ✓ The terrain of land should be sloping gently
 - ✓ The meeting place should be spacious enough to hold a group of about 30 persons, and should preferably be under a tree to provide shade. If possible, the place should be fenced using locally available materials for protection from wind and dust

II.3: COMPONENT 2: BUSINESS ENTERPRISE, MARKET LINKAGES AND CLIMATE-RESILIENT INFRASTRUCTURE DEVELOPMENT

152. This Component will contribute to the achievement of *Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurs and infrastructure providing services*. It aims at supporting Component 1 with the necessary infrastructure, market linkages and entrepreneurial capacities to deliver quality fisheries and aquaculture inputs and products linking the source, producer, intermediaries and the consumer. The component will play a key facilitative and intermediary role both on the inputs and output markets. It is built around strengthening of linkages and networks among value chain actors. Interventions include identification of viable investments and support to selected Producer-Public-Private-Partnerships (PPPPs (4Ps); development of essential value chain infrastructure (water supply systems for aquaculture, landing sites at lagoons, last-mile roads, first-point of sale input/output markets, sanitation facilities, intermediate markets, cold storage and processing facilities etc.); strengthening market linkages and promoting fisheries and aquaculture linked enterprises; business development services, especially to youth-operated enterprises along the value chain and financial linkages for the sustainable development of the sector. Focus will be placed on women, youth, the disabled and other vulnerable groups.

II.3.1: Subcomponent 2.1: Develop Enterprise Linked to Aquaculture and Inland Fisheries

153. This subcomponent will seek to establish and/or improve the efficiency and effectiveness of income-generating activities along the aquaculture and inland fisheries value chains. It contributes to Output 2.1: *Viable Enterprises for Improved Market Access Established*. Accordingly, it will focus on strengthening inland and aquaculture inputs and outputs market linkages, enterprises, and financial services. Specifically, it will: a) facilitate sustainable delivery of fisheries and aquaculture inputs to beneficiaries; b) support the development of business orientation for the producer groups for sustainable production to improve commercialization and market participation; and c) improve value addition and

market linkages through commercialization of the core activities of the inland fisheries and aquaculture value chain actors in the selected provinces to make them financially viable and bankable for the sustainable development of the sector. It will support interventions intended at broadening and deepening the fisheries and aquaculture value chains in Angola, with a series of strategic investments. In that regard, the use of Public-Private-Producers-Partnerships (PPPPs) will, especially, be promoted to operationalize the key public infrastructures rehabilitated/developed by the project as well as private anchor-producers to support access for inputs and markets for smallholder producers.

154. For sustainability, the sub-component subsumes private sector-led approaches in delivery of the interventions. In this regard therefore, coordination and dialogue with individual private sector actors will be essential throughout the duration of the AFAP II. Potential partnerships will be established with feed manufacturers, hatcheries, importers, traders, large producers, intermediaries, distributors, and financial institutions. Given this diversity, the project will need to develop a private sector engagement strategy and tailor its approach to private sector engagement to specific contexts and private-sector actors. The strategy will guide the project's efforts in leveraging and engaging private sector in development of the aquaculture and inland fisheries subsectors through partnerships and facilitating sustainable and inclusive business activities along the value chain. In addition, given that the aquaculture and inland fisheries subsector is not well developed, project resources could also be allocated to "private sector development" to support development of strategies and policies for developing and strengthening the private sector and market systems. A balance between "private sector engagement" and "private sector development" will be necessary to bring about AFAP II desired outcomes.

155. Specifically, the Subcomponent aims to identify the main areas of interventions along the aquaculture and inland fisheries value chains and to promote understanding of key stakeholders such as producer groups, private anchor producers, input manufacturers and suppliers, fish products buyers and off-takers, technical assistance providers and financial institutions (FIs). In addition, it will promote the development of enterprises along the aquaculture and inland fisheries value chains through the development of business plan proposals by the private sector.

156. The Project will seek to identify the opportunities as well as the weak and missing links in the aquaculture and inland fisheries value chains, for example, aggregation of demand for inputs (fingerlings and feeds) and last-mile distribution, production planning/scheduling at the farm level, output aggregation and cold storage facilities, basic processing and value addition, market access and the creation of robust PPPPs that would address the challenges. A fish and aquaculture market assessment was conducted under AFAP which informed this design, however there are information gaps. AFAP-II will conduct detailed value chain analyses of aquaculture and inland fisheries concentrated on the target provinces. The analyses will identify among others, existing infrastructure currently in the public sector with opportunities for enhancing performance and efficiency by using PPPPs. While the precise nature, mix and scope of investments will be determined based on information collected during the detailed value chain analysis, information presently available indicates the following gaps and preliminary areas of intervention:

Expected Results

157. The subcomponent contributes to Output 2.1: Viable Enterprises for Improved Market Access Established, with the following expected results:

- One (1) detailed market analysis and assessment study produced for the aquaculture and inland fisheries value chain.
- One (1) private sector engagement strategy developed.

- Five (5) 4P agreements established, two (2) to manage the public facilities at Masangano and Kamibafu, two (2) with feed manufactures and two (2) to manage public smart market to be constructed by the project.
- Eighty-five (85) enterprises, each owned by a five-member youth group, developed through competitive business plans to operate smart kiosks. This translates to 240 youth supported.
- To compliment the smart kiosks model, twenty-five (25) private “Anchor Producers” contracted.
- 22,250 farmers supported with various interventions under this subcomponent as follows:
 - Number of farmers linked to input/output markets – 22,250.
 - Number of farmers receiving Business Development services (BDS) – 22,250.
 - Number of farmers accessing input subsidy for cage aquaculture – 6,250 (this will be provided in a graduated scale as: Cycle1 -100%, Cycle2- 80%, Cycle3- 50%)
 - Number of farmers accessing input subsidy for pond aquaculture – 6,000, broken down as follows – (a) Level 1 (vulnerable), 4,000 input subsidy graduated as: Cycle1-100%, Cycle2-80%, Cycle3-50%; (b) Level 2 farmers 2,000 input subsidy graduate as: Cycle1-80%, Cycle2-50%
 - Number of fisherfolk accessing inputs (nets etc.) – 10,000
 - Number of farmers accessing crops inputs – 10,000, broken down as follows – Pond level 1 farmers 4,000, Cage farmers 4,000, Inland fisherfolk 2,000.
- Number of producer groups (cooperatives) receiving BDS – 400, estimated as:
- Number of SMEs/traders receiving BDS – 550 broken down as follows: 25 private “Anchor Producers”, 477 traders supported to access the smart markets, and 48 youth-led groups/SMEs operating the smart kiosks.

Key implementing Partners.

158. Key implementing partners – the following partners have been identified to support implementation of the planned interventions under the subcomponent:

159. **The National Directorate for Rural Commerce Development (NDRCD)** – is a public institution whose mandate is development of rural enterprises by creating necessary conditions to promote rural market development and trade. In the agricultural sector, NDRCD focuses on linking producers and traders in such a manner that promotes fair trade and promoting aggregation of produce distributors for enhanced economic return on investments. The Directorate is implementing the integrated program for Rural Commerce Development (ICRCP) in seven including the AFAP II provinces, focusing on the following areas as regards agricultural development: (i) supporting production and commercialization through producer groups; (ii) promoting aggregation and trading of commodities; (iii) enhancing infrastructure for warehousing and distribution and; (iv) promoting financial linkages with banks for value chain actors. Strategic areas of partnership with AFAP II include: (i) selection of youth entrepreneurs to operate the smart kiosks and management of equipment lease agreements; (ii) capacity building of cooperatives on agribusiness and commercialization; (iii) financial linkages for private investors that will be operating the leased public infrastructures.

160. **National Institute for Support to Micro, Small and Medium Enterprises (INAPEM)**- is a public institution whose mandate is the development of the MSME sub-sector to contribute to the country's economic development. INAPEM supports MSMEs with legal services for business registration, business development services, and access to capital under two thematic areas: (i) Business Development – private sector development and improving the business environment especially to MSMEs and creating mechanisms for linking MSMEs with large companies; (ii) Capacity Building - training, including exchange programmes

directed to MSMEs, cooperatives, youth and women entrepreneurs aimed at strengthening business and management skills. Strategic areas of partnership with AFAP II include: (i) selection of youth entrepreneurs to operate the smart kiosks and management of equipment lease agreements; (ii) capacity building of cooperatives on agribusiness and commercialization; (iii) financial linkages for various actors including private investors that will be operating the leased public infrastructures.

161. **The Development Bank of Angola (BDA)** - is a public financial institution established in 2006 with the aim of supporting the country's economic growth by providing development finance. BDA operates various financial instruments/products targeting multiple sectors. For the fisheries and aquaculture subsectors, DBA has rolled out financial products with the aim of promoting the development of maritime fishing and aquaculture through the modernization of capture methods and methodologies, production structures, the introduction of new technologies to increase of fish production. The project will partner with DBA to enhance the value chain actors access to finance. The project will also seek partnerships with other financial service providers (commercial banks and microfinance institutions) in this regard.

Preparatory Activities

162. In order to facilitate achievement of the desired results, the following preparatory activities will need to be completed during the start-up phase of the project: These activities will be included in the first 18-month Annual Work Plan and Budget (AWPB) and Procurement Plan (PP).

- *Contracting of implementing partners* – The project will prioritize the contracting and on-boarding of implementing partners through acceptable procurement processes as outlined in the procurement plan approved by IFAD. It is expected that NDRCD and INAPEM will be contracted through single sourcing arrangements. Concerning BDA and other financial institutions, simple memorandum of understanding (MoU) will suffice, considering that no project funds are expected to be disbursed to these partners. The agreements with the implementing partners, will be rationalized based on the project needs and available resources both financial and staff at the PMU. The agreements will be output-based with clear deliverables and timelines.
- *Detailed market analysis and assessment of the aquaculture and inland fisheries value chain*- The project will procure a technical service provider (either individual consultant or consultancy firm) to carry out detailed market analysis and assessment of the aquaculture and inland fisheries value chain to inform that the precise nature, mix and scope of investments/interventions under this subcomponent. The detailed value chain analysis will seek to identify the opportunities, the weak and missing links as well as risks in the aquaculture and inland fisheries value chains. The analysis will identify among others, existing infrastructure currently in the public sector with opportunities for enhancing performance and efficiency by using 4Ps.
- *Development of private sector engagement strategy* - The project will procure a technical service provider (either individual consultant or consultancy firm) to develop a private sector engagement strategy to guide the project's efforts in leveraging and engaging private sector in development of the aquaculture and inland fisheries subsector. The strategy will also support development of private sector investments in the subsector.

Implementation of detailed Interventions

163. To achieve the intended sub-component output, the following activities are planned:

- a) *Establishment of PPPP agreements to operationalize the public fisheries infrastructures*– To enhance production and supply of fingerlings to producer groups, the project will establish PPPP agreements through competitive process to operationalize the facilities at Masangano and Kamibafu. Current assessment indicates that Masangano and Kamibafu have the potential to produce enough fingerlings for the market. Nevertheless, the facilities are not operating at full potential largely due to management issues. The project will establish two PPPP agreements through a competitive process to manage and operate these facilities for sustainable supply of fingerlings to producer groups. Successful private companies will be expected to prepare robust business plans as part of their proposals indicating expected production capacity and required capital. Based on the business plans, the project funds may be utilized for refurbishment of these facilities focusing on “public goods” such as access roads and immovable equipment, while the investors will be expected to cater for working capital and movable equipment. Additionally, the project will establish a PPP agreement for the management and operationalization of one smart market as a pilot to inform and stimulate further private sector investments in additional smart markets. To support the implementation of this activity, the project will procure technical assistance to support development of a private sector engagement strategy, and specific private sector investments. If needed, the project will facilitate the investors through letter of comfort from the Government, to access commercial finance.
- b) *Establishment of PPPP agreements with fish feed manufactures to produce and supply quality feeds to producers* – One of the key constraints in the aquaculture value chain in Angola is lack of access to quality inputs (feeds and fingerlings) by the farmers. There are a few large feeds manufactures based in the capital, for instance Supermarca. These firms have the capacity to produce sufficient feed but are currently operating at sub-optimal capacity largely due to low demand. Furthermore, these firms lack distribution networks in the provinces and most farmers source the feeds from the capital, Luanda. The project will establish competitive PPPP agreements with at least two large fish manufacture to produce and supply quality feeds to the producer groups. The PPPP agreements will stipulate the guaranteed aggregated demand of fish feeds from the project beneficiaries as incentive to the feed manufacturers. On the other hand, the manufactures will commit to timely supply of quality feeds as per the agreement. Where necessary, the project will support technical assistance in formulation of the feeds.

Activities (i) and (ii) will be implemented as depicted in the figure below:

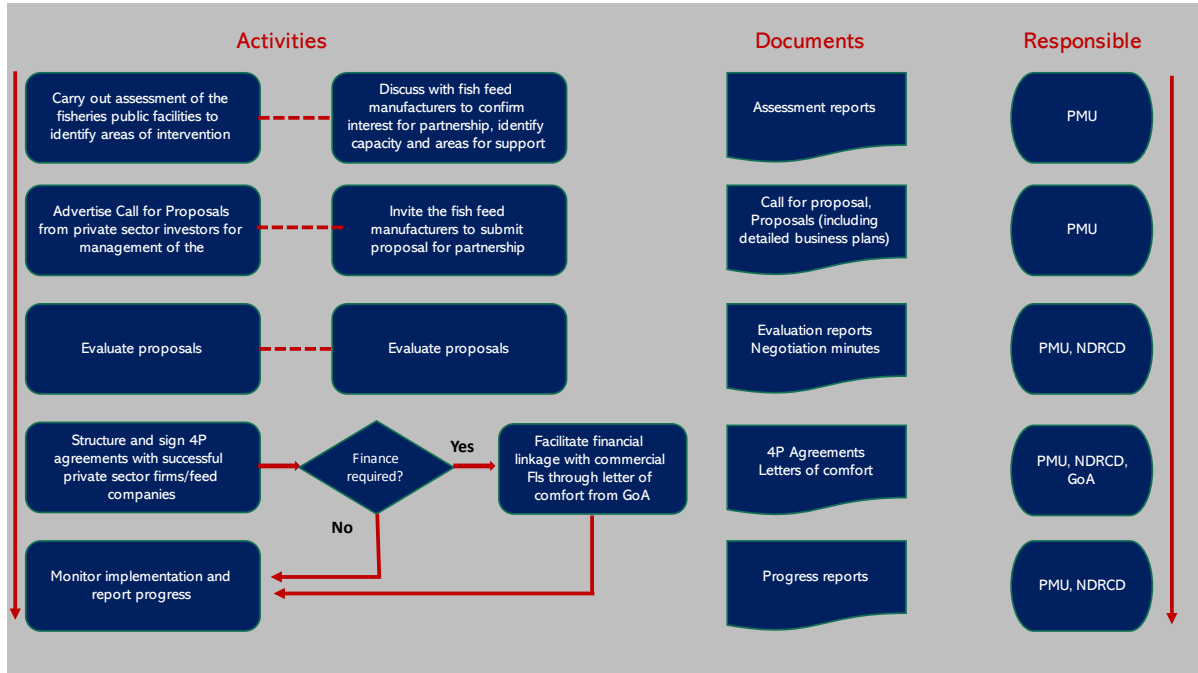


Figure 1: Establishment of 4P agreements for fisheries public facilities and fish feeds

- c) *Development of enterprises through competitive business plans to operate smart kiosks –* The distributive capacity for quality fisheries and aquaculture inputs (feeds and fingerlings) to farmers remains a critical weak point, hampering farmers’ access to these vital inputs. To address this, the project will facilitate sustainable delivery of aquaculture and inland fisheries inputs to beneficiaries through a private sector led approach for sustainability. This will be done by development of enterprises aimed at enhancing last mile distribution of inputs to producer groups using the “smart kiosks” model. Each smart kiosk will be operated by a five-member youth group. The project in collaboration with INAPEM and DCRD will identify the youth groups through a competitive business plan process. To jump-start operations of the smart kiosks, the project will support the successful youth groups with matching grants for working capital on a competitive basis, as outlined in their business plans. The project will develop a detailed grants manual outlining how the grants will be implemented. Successful youth groups will also be provided with Business Development Services (BDS), mentorship and business incubation leveraging on the training programs offered by INAPEM and DCRD. The BDS will be designed to be comprehensive and tailored to the unique needs of the youth entrepreneurs, helping them to overcome the specific challenges they face and to leverage their potential for economic and social impact. Some of the areas that may be covered in the BDS are business management including planning and financial management; mentorship and networking; access to finance; marketing and access to markets and legal and regulatory guidance. While principally the smart kiosks will act as last mile input distribution points, the full range of services/enterprises to be operated include: (i) Input dealing - aggregation of demand from farmer groups, stocking and distribution to farmer groups; (ii) technical assistance to producer groups on basic agribusiness practices such as record keeping, production planning/scheduling and stocking and correct application of feeds; (iii) buy back arrangements from producer groups, aggregation and cold storage; (iv) basic processing and value addition (filleting, drying, smoking etc.) and; (v) marketing. It is expected that forty eighty (48) smart kiosks will be built and allocated to the youth groups through a lease agreement to be administered by DCRD. The project will also provide input subsidies to the farmer groups using this network. This is expected to

support business growth and development of the smart kiosks by guaranteeing sales during the subsidy period. It is expected that the 17,250 aquaculture farmers and fisherfolks will be supported with input subsidy as follows:

- *Cage aquaculture* – 6,250 farmers (125 communities each comprising about 50 farmers) will be provided with 625 cages (25 cages per community) and graduated inputs subsidy as: Cycle1 -100%, Cycle2- 80%, Cycle3- 50%)
 - *Pond aquaculture* – 6,000 farmers will be provided with graduated input subsidy as: (a) vulnerable, Level 1 farmers (4,000): Cycle1-100%, Cycle2-80%, Cycle3-50%; (b) Level 2 farmers (2,000): Cycle1-80%, Cycle2-50%
 - Number of fisherfolk accessing inputs (nets etc.) – 10,000
 - *Crops inputs* – will be provided to 10,000 fisherfolk as: Pond level 1 farmers 4,000, Cage farmers 4,000, Inland fisherfolk 2,000.
 - In view of the financial sector landscape and ICT infrastructure in Angola, it is expected that input delivery will be rolled out using manual vouchers. Nevertheless, the PMU will assess the situation at start-up phase of the project for possibilities of implementing the innovative e-voucher system learning from experiences in Kenya.
 - The input subsidy will be delivered through the network of smart kiosks and Anchor Producers as “agro-dealers.”
 - The detailed implementation process is as depicted in the figure below:
- d) *Identification and contracting of private Anchor Producers linked to smart kiosks and supporting smallholders’ access to inputs, markets, and advisory services* – to compliment the smart kiosks, the project will also identify and contract private “Anchor Producers”. Current assessment indicates the existence of several large private aquaculture producers in the project areas. These large producers have better access to inputs due to economies of scale. Similarly, they also have better access to structured markets (supermarkets and large off-takers such as Chinese firms and mining companies), which they are unable to meet. The project will contract twenty-five (25), five per province, of these Anchor Producers. The Anchor Producers are expected to serve the producer groups directly and/or through the network of smart kiosks. To incentivize these private actors, the project will provide technical assistance on a need basis in addition to facilitating their access to commercial finance.

Activities (iii) and (iv) to a large extent will be implemented as depicted in the figure below:

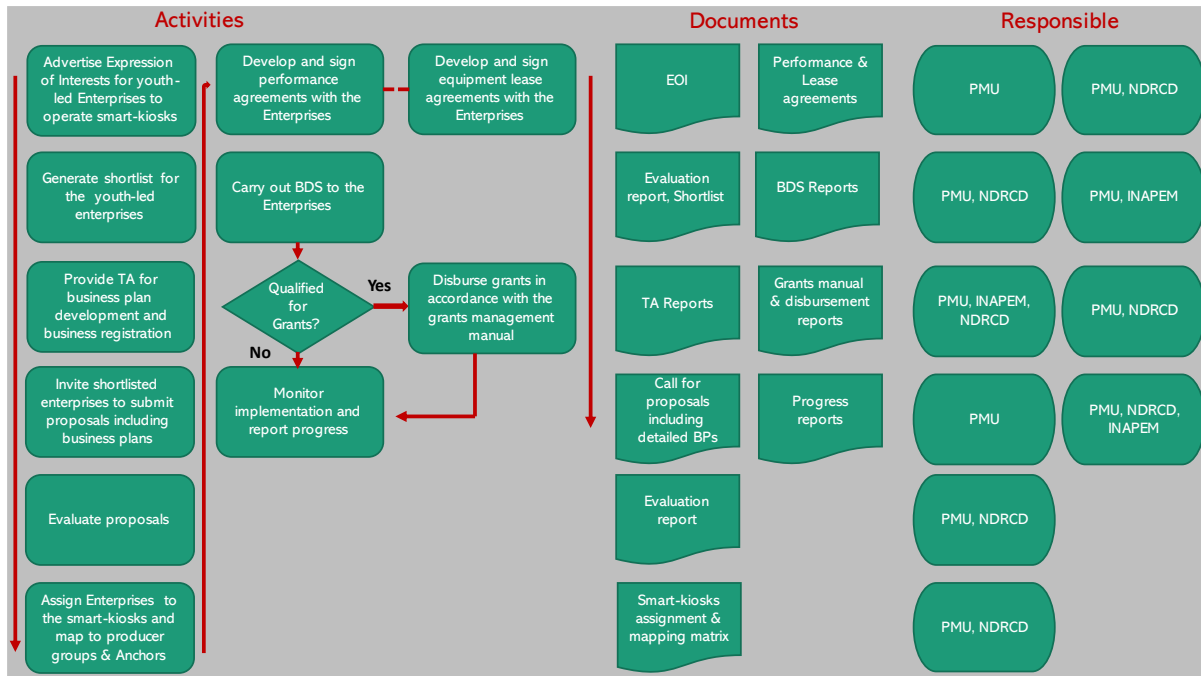


Figure 2: Development of enterprises for the smart kiosks.

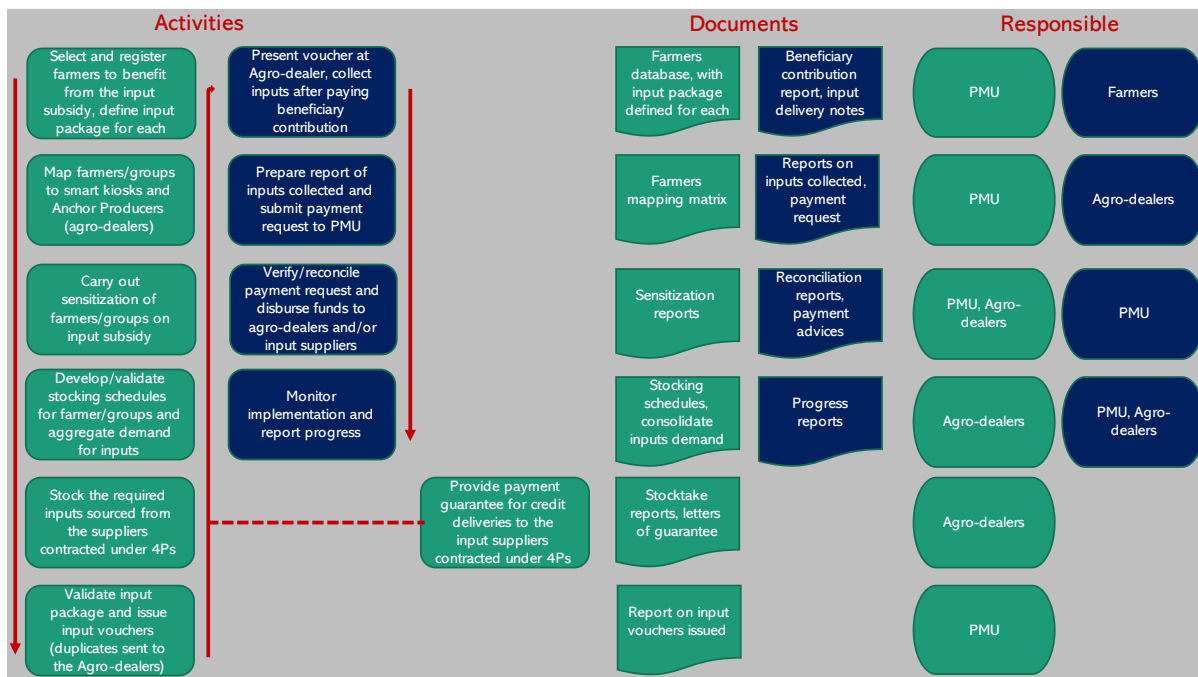


Figure 3: Inputs subsidy delivery

- e) *Provision of Business Development Services to selected actors/enterprises* – to support the growth of business enterprises along the aquaculture and fisheries value chains for sustainable development of the subsector, the project will offer business development services to various actors (producer groups, smart kiosk operators, Anchor Producers, fish traders etc.). For effectiveness, efficiency, and sustainability, the BDS will be provided in collaboration with INAPEM and DCRD. While the exact nature of the BDS to be provided will depend on the needs assessment of the various actors, the following areas are probable: (i) Financial literacy, record keeping and business orientation for producer

groups for sustainable production to improve commercialization and market participation; and (ii) entrepreneurship, support for business registration and business plan development for youth groups and fish traders. This activity will be implemented as follows:

- *Capacity needs assessment* – the project will procure technical service provider(s) to carry out capacity needs assessment of the various actors (producer groups/cooperatives, SMEs operating the smart kiosks and anchor producers. The findings of the capacity need assessment will inform the exact nature of the BDS to be provided to the actors. This activity will be implemented in collaboration with INAPEM. The institution already has a database of BDS providers that can be contracted competitively for this exercise.
 - *Business Development Services* – similarly actual BDS will be provided in collaboration with INAPEM by service providers competitively recruited. To avoid conflict of interest, firms that have been involved in capacity needs assessment may not offer actual BDS to the same actor.
- f) *Supporting access to finance for value chain actors through existing government programmes and commercial financial service providers* – Access to finance by the value chain actors is key for the development of the aquaculture and inland fisheries subsector in Angola. Currently, there is limited access to finance by actors despite several initiatives promoted by the GoA through commercial banks and the Development Bank of Angola (DBA), largely due to the unstructured nature of the aquaculture and inland fisheries value chains. It is expected that the project interventions will go along way in supporting structuring of the aquaculture and inland fisheries value chains by establishing viable enterprises and thereby de-risking the subsector to make it attractive to the financial service providers. In this regard, the project in collaboration with INAPEM and DCRD will from the onset, carry out scoping and sign MoUs with suitable financial institutions aimed at improving access to finance for its beneficiaries and value chain actors. The objective of the MoUs is to mobilize the various project beneficiaries/value chain actors to benefit from the access to finance initiatives promoted by the GoA through the financial institutions. Specifically, through the BDS on the demand side, the project will improve the bankability of its beneficiaries and other value chain actors and generate a pipeline of possible clients for the FIs. On the other hand, on the supply side, the FIs will be expected to develop financial products matching the requirements of the project beneficiaries/ value chain actors. Additionally, the project will avail the detailed value chain studies/assessments to the financial institutions. The value chains studies will identify financing opportunities/gaps together with the associated risks along the chain to enable financial institutions make informed lending decisions and facilitate FIs investments in the sub-sector.

164. The proposed value chain map is depicted in Figure 1 below.

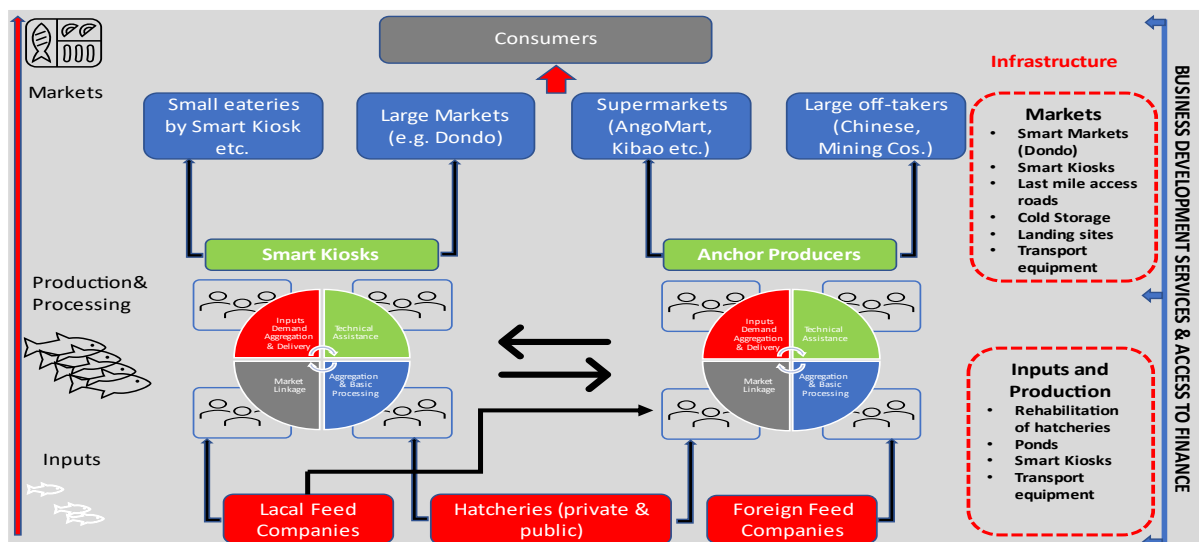


Figure 4 : AFAP-2 Value Chain Map

II.3.2: Subcomponent 2.2: Enhancing Market Access and Infrastructure Establishment

165. This subcomponent focuses on enhancing market infrastructure to facilitate business connections, improve market access, and cultivate an environment conducive to economic growth within Angola's inland fisheries and aquaculture sector. Aligned subcomponent 2.1, it aims to deploy interventions that promote mutual benefits among stakeholders. Key activities planned under this subcomponent include:

166. **Market Access Enhancement through Last-Mile Roads** - The project will construct and upgrade last-mile all-weather roads to address transportation challenges, connecting aquaculture farms and lagoon landing sites to trunk roads and markets. Approximately 100 km of roads per province, totaling 500 km across project areas, will be gravelling and graded. Climate resilience measures such as camber and drainage enhancements will be incorporated to ensure road durability, particularly against climate change-induced challenges like floods and erosion.

167. **First Landing Point of Sale Facilities for Post-Harvest Efficiency** - Twenty-five Fish Landing Point of Sale facilities will be established at selected lagoons to reduce post-harvest losses and enhance profitability for small-scale fishers, including women and youth. These facilities will be competitively built and equipped with essential amenities, including sheds, running water, sanitation facilities, multi-functional areas, and micro-processing facilities. Integration of water and renewable energy sources will ensure sustainability and minimize environmental impact, with waste management solutions implemented for circular economies within the value chain.

168. **Smart Fish Kiosks and Smart Markets Integration** - Smart Fish Kiosks and smart markets will be introduced as intelligent market outlets equipped with renewable energy and sustainable infrastructure. Smart Fish Kiosks will feature temperature-controlled cold-storage facilities powered by solar energy, reducing fish perishability and food miles. Smart Markets will utilize rooftop solar panels and bio-digesters, providing energy self-sufficiency and promoting circular economies within the agricultural value chain. These outlets will contribute to reducing post-harvest losses, enhancing energy access, improving infrastructure, promoting water sanitation and hygiene, managing waste, facilitating trading activities, and adding value to fish products.

169. **Water Supply Canal Systems for Aquaculture** - The project will support the construction of simple water supply canal systems operated by gravity to enhance water management and support sustainable aquaculture practices. Implemented by engaged service providers and communities, these systems will promote productive/economic use and improve sanitation and fish quality.

170. **Development of Hatcheries and Feed Production Facilities** - Private sector partnerships will be leveraged to establish hatcheries and feed production facilities, strengthening input production for the aquaculture sector. Government-owned facilities will be rehabilitated/upgraded under a Public-Private Partnership (PPP) model to ensure adequate supply of quality inputs. **The approach for the implementation of this activity is detailed in Subcomponent 2.1**

171. **Implementation of Waste Management Solutions** - Waste management solutions will be introduced at the smart markets, promoting circular economies within the value chain. Green, blue, and grey bin-waste management techniques will be employed to collect organic, inorganic, and non-biodegradable waste. Organic waste, including fish waste and water hyacinth, will be utilized for fish feed manufacturing and biogas generation. Non-biodegradable waste will be collected and processed through waste recycling plants. Integration with micro-mobility solutions will facilitate transportation and further promote circular economy practices.

Expected results:

172. **Rationale and Expected Results** – Effective market access infrastructure is crucial for the success of Angola's inland fisheries and aquaculture sector. It not only facilitates the transportation of fish products but also enhances post-harvest efficiency, reduces losses, and improves profitability for small-scale fishers and other stakeholders along the value chain. By employing a holistic approach, Subcomponent 2.2 seeks to address various challenges hindering market access for the inland fishery sector and infrastructure development that would catalyse rural economies linked to fish getting from farm-to-market. It will be delivered in complementarity with approaches defined under Subcomponent 2.1. in this document (PIM). In addition, subcomponent's expected results are linked and, in some cases, similar to results defined under Subcomponent 2.1. In addition, the expected results of the subcomponent are linked to the results defined Subcomponent 2.1.

- Construction, gravelling, grading, camber, and drainage of 500 km of Last-Mile Roads to improve transportation and connectivity for aquaculture farms and lagoon landing beaches/sites, ensuring efficient and reliable transportation of fish products.

- Establishment of 25 First Landing Point of Sale Facilities across selected lagoons, equipped with sheds, running water, sanitation facilities (VIPT), multi-functional areas, and micro-processing facilities to reduce post-harvest losses and enhance profitability for small-scale fishers.

- Installation of 85 Smart Kiosks and implementation of two (2) Smart Market pilot projects in Dondo and Bengo, utilizing renewable energy and sustainable infrastructure to create intelligent market outlets, reduce energy costs/emissions, and promote circular economies.

- Construction of 1000 Water Supply Canal Systems for aquaculture, enhancing water management, promoting sustainable practices, and supporting communities engaged in fish farming.

- Development of 1 Hatcheries Facilities and 1 Feed Production Facilities in Kamibafu and Masangano, through Public-Private Partnerships (PPP) models, to strengthen the production of quality inputs for the aquaculture sector.
- Implementation of Waste Management Solutions at the Dondo and Bengo smart markets, incorporating green, blue, and grey bin-waste management techniques to collect organic, inorganic, and non-biodegradable waste, contributing to sustainable feed production and biogas generation.
- Integration of micro-mobility solutions (wheelbarrows, motorcycles, tricycles) for transportation of fingerlings, feeds, wastes, and produce, promoting market linkages and circular economy in the fish value chain.
- Collaboration between public and private sectors with infrastructure, along with enterprise development initiatives, to create an environment conducive to economic development, food security, and poverty reduction in Angola's fisheries and aquaculture sector.

Implementation of Detailed Interventions

a) Market Access Enhancement through Last-Mile Roads:

173. Market Access Enhancement through Last-Mile Roads is a pivotal aspect of the AFAP II project in Angola, aimed at overcoming transportation and connectivity challenges within the inland fisheries sector. The initiative entails the construction and upgrading of last-mile all-weather roads connecting aquaculture farms and lagoon landing sites to trunk roads and markets. Implementation strategies involve gravelling and grading initiatives, covering a total of 100 kilometers per province and totaling 500 kilometers across project areas. Climate resilience measures, including camber addition and drainage installation (including culverts), will be incorporated to ensure road durability. This targeted focus on climate change aspects will ensure the transformation of production sites' accessibility to markets, particularly addressing flood-prone and eroded roads, thus ensuring year-round access.

Implementation Strategy:

174. Identification and Prioritization: The selection of roads for improvement activities will be guided by communities' development plans, proportional to the investment distribution among targeted value chains. Economic criteria, population served, social facilities accessibility, technical complexity, and environmental considerations will guide the prioritization process.

175. Survey and Design: Private engineering firms will conduct site surveys and designs, analyzing existing data and conducting necessary investigations. Designs will comply with technical specifications and environmental standards, with approval from relevant authorities. Bidding documentation will be prepared based on optimized designs.

176. Procurement: Competitive procurement processes will ensure the selection of contractors with relevant experience, equipment, and financial capacity. Procurement planning will prioritize dry seasons for execution, with contractors assigned specific durations for completion.

177. Rehabilitation/Construction Works: Contractors will execute works based on approved designs and specifications. Community sensitization will precede construction, fostering community involvement in road maintenance. Implementation will adhere to quality standards and timelines, utilizing an equipment-based approach.

178. Supervision of Works: Engineering firms will supervise works, ensuring adherence to technical specifications and guidelines. Supervision frameworks may include stationed staff

or periodic visits by supervising engineers. Monthly progress reports will monitor work quality and progress, facilitating timely interventions.

179. Defects Liability Period and Handover: Roads will undergo a defect liability period of at least six months post-completion, during which identified deficiencies will be rectified. Upon satisfaction, roads will be handed over to project authorities, ensuring future maintenance and management by relevant provincial government.

b) First Landing Point of Sale Facilities for Post-Harvest Efficiency:

180. The project aims to establish twenty-five (25) Fish Landing Point of Sale facilities at selected lagoons to mitigate post-harvest losses and enhance profitability for small-scale fishers, including women and youth in the value chain. Through competitive engagement with the private sector, these facilities will be equipped with sheds, running water, sanitation facilities (VIP latrines), multi-functional areas, and micro-processing facilities. Integration of water and renewable energy sources such as solar and biogas/electricity access will ensure sustainability and reduce environmental impact. Moreover, these facilities will serve as the first point of fish waste management, utilizing 'micro-mobility' for waste collection and processing. Waste collected will be repurposed upstream in the value chain for biogas and manure production, with a particular focus on addressing challenges posed by invasive water hyacinth. The management, maintenance, and operation of these facilities will be conducted through close collaboration between beneficiary groups or cooperatives and local/municipal governments, facilitated by an agreed user fee structure.

Implementation Strategy

181. The implementation strategy will encompass various stages, including identification/prioritization, design, procurement, construction, supervision, and handover. Initially, the selection of sites for the facilities will be guided by community development plans, ensuring proportional investment distribution among targeted value chains. Economic, social, technical, and environmental criteria will be utilized for prioritization, with a focus on maximizing value for money and serving smallholder fishfolks. Design and construction will be undertaken by competitively recruited private engineering firms, ensuring compliance with technical specifications and environmental standards. Procurement processes will prioritize contractors with relevant experience, equipment, and financial capacity. Construction works will involve community sensitization, emphasizing the contribution of local materials and unskilled labour. Supervision of works will be conducted by engineering firms, ensuring adherence to design guidelines and timely progress reporting. Following completion, a defect liability period as defined by the Government of Angola will be observed, during which any deficiencies will be rectified. Upon satisfaction, facilities will be handed over to program authorities and relevant government authorities for future maintenance and management.

c) Smart Fish Kiosks

182. Under the AFAP II Inland Fisheries Project in Angola, the implementation of Smart Fish Kiosks aims to provide temperature-controlled/cold-storage infrastructures to reduce fish perishability. These kiosks will efficiently utilize solar energy for sustainable, affordable, and reliable energy access while minimizing food miles through on-site fish storage. The design and construction of Smart Fish Kiosks will include roof-top solar panels catering to various energy needs, cold storage facilities, solar hot water access, retailing and display areas, produce storage/shelving, security features, and shading. Two models of Smart Fish Kiosks will be established: locally fabricated and re-fabricated from 40-foot shipping containers, both equipped with essential capabilities. Furthermore, Smart Fish Kiosks will be integrated with micro-mobility solutions, such as wheelbarrows, motorcycles, and tricycles, facilitating the farm-to-fork value chain and delivery of inputs into ponds, rivers, and lagoons.

Implementation Strategy:

i. Identification/Prioritization:

183. The selection of sites for Smart Fish Kiosks will prioritize areas with high fish production and accessibility, guided by community development plans and consultations with provincial government. Consideration will be given to the availability of adequate land/space and proximity to water bodies to ensure operational efficiency.

ii. Design and Construction:

184. Competitively recruited consulting firms with relevant experience will undertake the design process, considering site-specific conditions and compliance with national/international construction standards. Designs will encompass the integration of solar energy systems, cold storage facilities, and security features. Bidding documents will be prepared based on approved designs, and procurement processes will prioritize contractors with demonstrated capacity and experience in similar constructions.

iii. Supervision and Monitoring:

185. The consulting firm responsible for design will supervise construction works, ensuring adherence to technical specifications and quality standards. Regular site visits and comprehensive monthly reports will monitor progress and address any technical issues promptly. Ongoing training will be provided to beneficiaries on operations and maintenance requirements.

iv. 4. Defects Liability Period and Handover:

186. Upon completion of construction works, Smart Fish Kiosks will undergo a defect liability period of one year before being handed over to the AFAP II program and subsequently to provincial government. User fees collected from fish traders will sustainably support the operation and maintenance of the kiosks, ensuring their long-term viability and impact on the fisheries value chain in Angola.

d) Smart Markets

187. The implementation of Smart Markets under the AFAP II Inland Fisheries Project in Angola aims to establish intelligent market outlets utilizing renewable energy and sustainable infrastructure to foster circular economies and reduce energy costs and emissions. These markets will integrate rooftop solar panels, bio-digesters for food waste management, and other locally accessible renewable energy solutions to achieve energy self-sufficiency. Excess energy generated will be shared with offsite demands during periods of low energy utilization. Smart Markets will address various aspects of the agricultural value chain, including post-harvest losses, energy access, infrastructure, Water, Sanitation, and Hygiene (WASH), waste management, and trading activities. Cold chain aggregation centers and micro-processing facilities will be integrated to enhance market access and quality preservation in rural areas.

Implementation Strategy

188. Identification/Prioritization: Priority will be given to the construction of two smart markets in Dondo and Bengo, equipped with energy-efficient cold chain and processing facilities. Preliminary identification of suitable sites for Smart Markets will involve consultation and sensitization processes with provincial government. Consideration will be given to areas

with high production levels and lower estimated investment costs to ensure equitable distribution.

189. Design and Construction: Competitively recruited engineering firms will undertake the design process, considering site-specific conditions, market area, and capacity requirements. Designs will comply with national/international construction standards, incorporating privacy, sanitation, and accessibility needs, including provisions for women and persons with disabilities. Borehole water supply systems with solar pumping technology will be integrated where needed. Construction works will be executed by selected contractors in line with design specifications, with necessary O&M training provided to beneficiaries.

190. Procurement: Procurement processes will be launched based on the bidding documents prepared during the design stage. Contractors must demonstrate adequate experience and capacity to implement such constructions, with potential for partial subcontracting to facilitate auxiliary works.

191. Supervision and Monitoring: The consulting firms responsible for market design will supervise construction works, conducting day-to-day site visits and providing timely guidance to address technical issues. Monthly progress reports will be submitted to ensure adherence to technical specifications and quality standards.

192. Defects Liability Period and Handover: Upon completion of construction works, Smart Markets will undergo a defect liability for stipulated period. After this period, markets will be handed over to the program and subsequently to Government and managing partner for future management. Traders will pay user fees to sustainably operate and maintain market facilities.

e) Water Supply Canal Systems for Aquaculture

193. The AFAP II project in Angola aims to enhance water management and promote sustainable aquaculture practices through the construction of gravity-operated water supply canal systems for fishponds. This intervention serves as a climate adaptation measure, supporting communities engaged in fish farming while improving sanitation and fish quality. Competitively engaged service providers, in collaboration with communities, will construct these water systems, which will be managed by the Ministry of Energy and Water and Provincial Governments. Fishing community groups will oversee the management and maintenance of the canal systems, ensuring their productive and economic use.

Implementation Strategy:

194. To ensure the successful implementation of water supply canal systems for aquaculture, the following strategy will be adopted:

195. Identification and Screening: Potential sites for water supply canal systems will be identified based on communities' development plans and proportional investment distribution among targeted value chains. Economic, social, technical, and environmental criteria will guide the prioritization process, ensuring optimal resource allocation and impact.

196. Design and Construction: Competitively recruited private consulting firms will undertake surveys and design optimization for the water supply canal systems. Site-specific designs will be developed, adhering to technical specifications and environmental considerations. Construction works will be executed by contractors selected based on past experience, equipment quality, and financial capacity, with a focus on completing works during dry seasons.

197. **Community Engagement:** Beneficiary communities will be sensitized and involved in the construction process, contributing local materials and labor as required. This engagement will empower communities and build their capacity to maintain the canal systems effectively.

198. **Supervision and Monitoring:** The consulting firm responsible for design will supervise the implementation of construction works, ensuring adherence to specifications and guidelines. Regular site visits and comprehensive monthly reports will facilitate ongoing monitoring and timely resolution of technical issues.

199. **Defects Liability Period and Handover:** Upon completion of construction works, a defect liability period will be observed. Contractors will rectify any deficiencies identified during this period. Following satisfactory inspection by relevant authorities, including the AFAP II project and government, responsibility for routine maintenance and management will be transferred to the appropriate authorities.

f) Implementation of Waste Management Solutions

200. In addition to the smart market, the AFAP II project will introduce waste management solutions at the Dondo and Bengo smart markets, managed by the operators of the smart markets. The introduction of waste management solutions is crucial for creating circular economies within the value chain. Smart Fish Kiosks and smart markets will incorporate green, blue, and grey bin-waste management techniques to collect organic, inorganic, and non-biodegradable waste. Collected organic waste, including fish waste and water hyacinth, will be combined with Black Soldier Flies (BSF) for fish feed manufacturing and biogas generation. To promote sustainability, smart markets and other private sector business interventions will serve as centralization and collection points for waste management. This holistic approach of integrating circular economies into market infrastructure ensures inclusive, efficient, and sustainable food systems, contributing to a cleaner environment and improved income for residents. Furthermore, non-biodegradable waste will be collected and linked to waste recycling plants for proper processing and management. Additionally, the smart market will integrate with micro-mobility solutions, such as wheelbarrows, motorcycles, and tricycles, for the transportation of fingerlings, feeds, wastes, and produce, promoting and sustaining further market linkages and circular economy in the fish value chain in collaboration with the private sector and government.

Implementation Strategy

201. The implementation of waste management solutions will follow a structured approach to ensure effectiveness and sustainability. This strategy includes:

202. **Identification and Prioritization:** Prioritize locations for waste management interventions based on community development plans and proportional investment distribution among targeted value chains, considering economic, social, technical, and environmental criteria.

203. **Integration with Market Infrastructure:** Incorporate waste management solutions into existing smart market infrastructure, ensuring seamless operations and collaboration between market operators and waste management stakeholders.

204. **Stakeholder Engagement:** Engage with beneficiary groups, private sector partners, and government agencies to ensure buy-in and collaboration in waste management initiatives, fostering ownership and sustainability.

205. **Training and Capacity Building:** Provide training and capacity-building initiatives to market operators, waste management personnel, and other relevant stakeholders on waste collection, segregation, and recycling techniques.

206. **Monitoring and Evaluation:** Establish monitoring mechanisms to track the progress and impact of waste management interventions, periodically assessing performance and making necessary adjustments for continuous improvement.

207. **Collaboration for Sustainability:** Forge partnerships with government, waste recycling plants, and other stakeholders to ensure the long-term sustainability of waste management solutions, leveraging resources and expertise for collective impact.

208. By implementing these strategies, the AFAP II project aims to effectively address waste management challenges, promote circular economies, and contribute to environmental sustainability and socio-economic development in Angola's inland fisheries sector.

209. The success of this subcomponent relies on collaborative efforts among public sector interventions, private sector engagement, and enterprise development initiatives. By establishing critical market access infrastructure and implementing strategic interventions, it aims to unlock the economic potential of Angola's fisheries and aquaculture sector, contributing to economic development, food security, and poverty reduction.

II.4: COMPONENT 3: INSTITUTIONAL STRENGTHENING, POLICY SUPPORT AND PROJECT MANAGEMENT

210. This will be a cross-cutting component servicing the two technical components and facilitating pathways for the effective and inclusive functioning of the inland fisheries subsector, from production to consumption. The objective of the component is twofold to: a) provide targeted support to selected policy areas and augment the capacity of selected institutions to facilitate participatory planning and development processes and oversee AFAP-2 implementation; and b) manage the Project in an efficient and effective manner by providing overall coordination, including planning and implementation, financial management and control, procurement support, Monitoring and Evaluation, knowledge management, and progress reporting. It will also ensure liaison and linkage with all other relevant projects/programmes being implemented in the country that seek to address similar or related constraints. This would be aimed at taking advantage of existent synergies and avoiding duplications. Accordingly, the component has two subcomponents: a) Subcomponent 3.1: Institutional Strengthening and Policy Support; and b) Subcomponent 3.2: Project Management.

II.4.1: Subcomponent 3.1: Institutional Strengthening and Policy Support

211. Interventions under this subcomponent will contribute to the achievement of *Outcome 3: Strengthened institutions and policies for a sustainable and inclusive inland fisheries sector*. Interventions under this subcomponent will serve as a means to sustain the benefits of AFAP-2. The interventions will help to develop or improve existing institutional systems and processes. The success of AFAP-2 will largely be influenced by the implementation capabilities of the institutions to execute the Project as per the design. The subcomponent has a dual focus: institutional strengthening and policy support.

212. ***Institutional Strengthening*** – This interventions seeks to augment the capacity of the institutions (public and private sector/community-based/farmer-owned) that will be responsible for overseeing and/or implementing the different AFAP-2 activities. Thus, the institutions that will be supported under this subcomponent include government institutions that will implement the Project directly and those supporting the smooth implementation of the Project indirectly at different levels of the Government. Farmers'/fishers' groups (associations, unions, cooperatives, etc.) will be key implementing partners for AFAP-2 and, hence, they will be supported to address capacity gaps. Private sector institutions are also crucial stakeholders in the successful implementation of the Project, including technology suppliers, input dealers, off-takers, after sale service providers, contractors, and consultants.

AFAP-2 will seek to ensure that they are enabled to appropriately provide the needed services along the different links of aquaculture/fisheries. Depending on the nature on the planned intervention, specific Technical Assistance/consultancy will be recruited to provide the needed training capacity building. Some of the requisite ToRs have been provided in the PIM while others will need to be developed as part of the recruitment process. It is also pointed out that some of the training will be provided by IFAD. Some of the specific activities under this intervention will include:

213. *Build the PMU capacity for effective implementation* – The Project will support the PMU staff to enhance their coordination abilities, financial management, procurement, planning, monitoring and evaluation, knowledge management. This will be done as soon as the PMU staff are recruited. These trainings will seek to ensure compliance with the requirements of the different financing institutions. In addition, particular steps will be taken to spread awareness about the IFAD policies on fraud and corruption; this would be done for all stakeholders. The trainings under this intervention will be provided by IFAD. The planning/timing for the trainings will be done in consultation with the PMU.

214. *Build the capacity of IPA to coordinate and integrate the provision of inland fisheries and aquaculture extension services* – The project will aim to address the existing gap in the provision of effective extension services in the inland fisheries sub-sector (aquaculture and capture fisheries). IPA will need to identify personnel that will be trained to support implementation during and after the project period;

215. *Provision of the logistic support for effective service delivery* – Logistical limitations at the provincial and municipality levels complicates the ability to reach the target beneficiaries in the communities. The Project will provide motorcycles for use by the relevant provincial and municipality staff service delivery to the target beneficiaries. The user units will provide the requisite specifications to the PMU which will undertake the procurement in a manner that would ensure a timely delivery of the motorcycles.

216. *Improve the capacity for coherent data collection* – This will involve: a) M&E workshop/training with AFAP-2 implementing partners to validate the reporting formats, agree on reporting timelines to ensure harmonization of all data collection methods; b) Training to Field Extension Officers on data collection of output indicators, facilitated by the PMU and supervised by the M&E Specialist. The training will involve active participation of beneficiaries at the grassroots level. This training aims to enhance beneficiary capacity, foster accurate data collection practices, and minimize the risk of data manipulation; c) Provision of IT equipment (e.g. computers, etc.) and development of a Management Information System (MIS) for the MINPERMAR and eventual training to all the users/stakeholders of the MIS – in collaboration with the national institute of statistics;

217. *Build capacity for identifying and addressing gender, youth and nutrition issues* – In order to effectively achieve this objective, the PMU will be equipped with adequate knowledge and skills to conduct relevant nutrition analyses, identify entry points along the food value chains, design targeted interventions for the most nutritionally vulnerable and strengthen integration of gender and youth from a food system perspective. This will require preparation of strategies and action plans; these will guide the provision of training on nutrition/gender/youth sensitive approaches and have them institutionalised in all implementing agencies. During the first year of implementation, the Project, in consultation with IFAD, will recruit the appropriate Technical Assistance/Consultancy to prepare the AFAP-2 gender, youth and nutrition mainstreaming strategies and the associated action plans. Service providers would then be recruited to provide the needed training although some of the trainings will be provided directly by IFAD;

218. Training to raise awareness about climate change, its impacts on fisheries and aquaculture, and the importance of building climate change resilience in the sector – The

Project will build capacity to access and utilize climate information and forecasts for decision-making to inform aquaculture planning and management – Such data would be useful severally, including climate-resilient pond management techniques, water conservation and efficient use, pond construction and design to withstand climate-related challenges

219. Improve the capacity in identifying and addressing factors constraining effective functioning of community-based organisations.

220. During year one of AFAP-2 implementation, the Project will recruit a TA/consultancy to undertake an institutional capacity gap assessment through intensive engagement of stakeholders, formulate a capacity development plan, and support implementation of that development plan. This is aimed at ensuring the capture and redress of those institutional capacity gaps that could not be identified during design.

221. **Policy Engagement Support** – GoA positions aquaculture as the backbone of fish production in the country, as defined in the PDN 2023 – 2027 and the PLANAPESCA. Interventions in the fisheries sector are being supported by the following legal framework: a) the presidential decree of no.8/23 of 2023 defining the management measures for marine fisheries, continental fisheries, aquaculture and salt; b) presidential decree no. 139/13 of 2013 defining the continental fisheries regulation; c) presidential decree no. 39/05 of 2005 and presidential decree no 41/05 of 2005 defining aquaculture and general fisheries regulations, respectively; and d) the presidential decree no. 43/05 of 2005 defining the fisheries monitoring regulation. However, AFAP established that there is lack of a supportive policy environment to help guide and protect the growth of the subsector. To that effect, the focus of this intervention will be to facilitate the development, review and update of policies and strategies in areas identified as critical for the effective and sustainable development of Angola’s inland fisheries. Some of the areas identified as being key in the policy arena include:

- Support to IPA for the formulation of inland fisheries/aquaculture extension strategy/system – The country’s inland extension service provision is inadequate. AFAP-2 will support the relevant institutions to develop an inland fisheries extension strategy. Efforts will be made to prioritise this intervention so that the Project can also support implementation of the developed strategy; this will contribute to sustaining AFAP-2’s successfully interventions;
- Development and adoption of a community-based fisheries production and management policy. This would provide a legal basis for the development and functioning of structures such as CCPs, LMPs, etc.;
- Establishment of policy guidelines aimed at standardizing fish feed quality. With the ongoing expansion of the aquaculture industry in Angola, the guidelines will be crucial to ensure that there is a uniform national quality standard of product and processes applicable to both locally produced and imported feed, which should be benchmarked to international standards; and
- Establishment and promotion of policy instruments aimed at encouraging private sector investments in fisheries and aquaculture development. Such instruments could include: a) attractive financial incentives; b) facilitate the establishment of PPPs thereby leveraging the strengths of both sectors; and c) encourage the establishment of appropriate financial mechanisms to enhance access to credit and investment capital for small and medium-sized enterprises (SMEs) in the fisheries and aquaculture sector.

II.4.2: Subcomponent 3.2: Project Management

222. For details on this Subcomponent, see Section I.5 (Institutional arrangements and responsibilities) of this document.

II.5: ANNUAL SUPERVISION

223. AFAP-2 will be jointly supervised by IFAD and GoA to assess achievements and lessons learned and, when required, provide implementation support with the objective of ensuring effective Project implementation and increase the likelihood of achieving the target objective. Missions would be fielded at least once every twelve months. However, and depending on the extent and quality of implementation progress, implementation support Missions would be fielded as frequently as warranted by conditions on the ground so as to address any emergent issues that may have the potential to negatively impact Project implementation. But, and depending on the extent and quality of implementation progress, implementation support Missions would be fielded as frequently as warranted by conditions on the ground so as to address any emergent issues that may have the potential to negatively impact Programme implementation.

224. The composition of the implementation support mission would be influenced by the issues identified as needing redress. As part of the annual missions' objectives, a review of the effectiveness of implementation arrangements will be undertaken to ascertain whether any adjustment/restructuring is needed to ensure optimum performance. ToRs for the supervision missions will be prepared by the IFAD Country Director except those for the Financial Management consultant; IFAD's Financial Management Division (FMD) would be responsible for preparing the ToRs and recruitment of the Financial Management consultant for the mission. The timing of the supervision missions will be influenced by factors, such as the status of AWPB implementation, coordinated with the production of interim financial statements in accordance with IFAD interim financial reporting guidelines. This will enable Supervision Missions to measure the progress at the specific cut-off dates.

II.6: MTR

225. An AFAP-2 MTR will be undertaken halfway through Project implementation; it will evaluate whether the Project is on course to achieve the objectives. It will identify any prevailing constraints and recommend such re-orientation as may be required to help the Project get back on course to achieve its objectives.

226. There will be four outputs of the MTR: a) an Aide Memoire summarizing the findings; b) MTR report, using the IFAD template, detailing the findings and recommendations on the way forward; c) a revised PDR (if the MTR has necessitated a restructuring of the Project) to reflect the mission's recommendations; and d) a detailed Project closure plan. This will be accompanied with: a) a revised budget to guide utilization of the remaining funds; and b) an updated PIM.

227. Undertaking of the MTR is the responsibility of government. The Government may consult IFAD to facilitate the process, including identification of consultants, etc.

II.7: PROJECT COMPLETION

228. The Project Completion Review (PCR) exercise at the end of AFAP-2 implementation will be led by IFAD with key contributions from the borrower, covering the elements described in the general conditions of the Financing Agreement, as described in the 2023 PCR Preparation Guidelines.

229. The main purposes of the completion review process are to promote accountability, reflect on performance and elicit lessons learned to inform future programme/project design and to define an appropriate post-project strategy. The learning dimension of the completion process will be used by both IFAD and GoA as the foundation for improvements in future programme/project design and implementation. The completion review process will also be critical for identifying opportunities for scaling-up best practices. The PCR would need to be

undertaken after AFAP-2 completion but before the Project closure period. The PCR will be undertaken in two distinct steps: a) a Beneficiary Impact Assessment (BIA)/End-line Survey; and b) Project Completion Report preparation. If a detailed project closure plan does not get developed at MTR, it should get developed subsequently but, certainly, earlier than the last year of implementation.

230. *Recruiting the Completion Review Team* – About six months before the planned start of the completion review mission, it is recommended that IFAD takes the necessary actions to identify and recruit the members of the Completion Review Team. By that time, IFAD, in liaison with GoA, would have agreed on the composition of the Completion Review Team (number of persons and types of expertise required) during the last supervision mission. Given AFAP-2 specific domains of intervention, the expertise will be selected to ensure coverage of all Project domains.

PART III: PROJECT PROCEDURES

III.1: PLANNING AND AWPB DEVELOPMENT

231. AFAP-2's planning cycle will follow GoA's planning and budgeting cycle. The cycle will commence with the preparation of the AWPB as a key instrument for implementation, operational control and annual monitoring and evaluation of the Project physical and financial progress. AFAP-2 will apply a bottom-up participatory planning process for the AWPB preparation with the participating municipalities and provinces playing a significant role. The Monitoring and Evaluation Officer, to be based within the National PMU, will be responsible for leading and coordinating the planning processes as well as preparation and consolidation of the Project's AWPB. The approved AWPB will be the only mechanism through which AFAP-2 resources would be spent.

232. The AWPB for the first year will be based on the PDR and its annexes and will be revised by the PMU at start-up. The subsequent AWPBs will follow the overall annual planning cycle with adjustments made when necessary following recommendations from joint IFAD-GoA supervision missions.

III.2: MONITORING AND EVALUATION

233. **M&E System – Key elements of the M&E system.** AFAP2 will develop a robust M&E system in compliance with IFAD and the Government of Angola requirements. The AFAP-2 M&E system will generate timely and accurate information to support decision-making and adaptive management. In particular, it will: (i) collect, process, analyse and update information on Project outputs, outcomes and impact; (ii) support the PMU and the Steering Committee in planning and making informed decisions on AFAP2 strategies and actions; (iii) maintain and strengthen strategic partnerships with stakeholders; and (iv) create opportunities for learning and sharing results. The system will be guided by four main documents:

- The Theory of change (ToC), which provides a comprehensive description and illustration of how and why the desired changes are expected to happen in the context of rural Angola.
- The Logical Framework (LF), which offers an overview of the Project's goal, outcomes and outputs, and enables to track progress against expected results on a selection of key indicators
- The Results Framework (RF), which lays out all the indicators to be collected by the Project's M&E system, including those not presented in the LF.
- The AWPB, which sets management priorities for the financial year. It is a tool to control costs, review performance and assess the achievement of targets each year.

234. These four documents are closely linked to each other: The activities planned in the AWPBs should lead to the achievement of Project outputs listed in the LF and the RF. To ensure alignment between the LF and the yearly AWPBs, the PMU will set annual targets for output indicators in the LF, and these annual output targets will guide the development of the AWPB. The achievement of LF results will show whether the Project's ToC is correct. If for example the achievement of the expected outputs does not lead to the desired outcomes, then the ToC underlying the Project design may be mistaken.

235. The system will be participatory and gender sensitive. It will include beneficiary feedback and grievance redress mechanisms. Data will be disaggregated by gender, by age, and – where possible – by Persons with Disability (PwD). Targets for outreach to PwDs have been included in the AFAP2 LF and may be revised based on the findings of the baseline study which will provide more precise data on the prevalence of disability in the targeted

communities. AFAP2 will collect the views and opinions of the target group through regular focus groups carried out during field visits, as well as through quantitative and qualitative information coming from the COI surveys and from complementary studies. The Core Indicator measuring Empowerment will be collected at baseline, at mid-line and at completion, and will give an indication on whether the Project is succeeding in addressing the barriers faced by the target group, in particular by women and by youth.

236. *M&E responsibilities.* Data collection, verification and use will be a joint task by all Project stakeholders. The primary responsibility will lie with the M&E unit within the PMU, which will be staffed with a dedicated M&E officer and a KM officer. M&E responsibilities at provincial level lie with the M&E Focal Points from the existing government structure at the province. The provincial M&E FPs and extension staff will receive training aimed at strengthening the GoA's M&E capacity.

237. *Key deliverables.* The key M&E actions and deliverables to be carried out throughout project implementation are presented below. These deliverables and timelines will need to be confirmed and further detailed during the preparation of AFAP2's M&E manual and plan

238. Deliverables which will be the primary responsibility of the M&E Unit are the following:

- AWPB preparation and monitoring
- COI survey reports (baseline, mid-line, end-line) – these reports will be outsourced to external partners, but the ultimate responsibility for their production lies with the M&E Unit who will oversee the work.
- LF with updated results
- Semi-annual and annual reports

239. Deliverables to which the M&E unit will provide its contribution include

- Management reports
- Procurement plans
- Supervision reports
- MTR report
- Project Completion Review

240. Throughout the Project lifetime, the M&E Officer will be able to access technical advice and backstopping services from IFAD. Support may be needed at certain times during the Project period, for example when a draft mid-term survey report must be reviewed. Provisions are made in the cost tables for on-demand support on M&E.

241. **Logical Framework** – AFAP-2 logframe with pre-defined Core and Project-specific indicators has been developed and, to the extent possible, these indicators have been quantified. The monitoring indicators, disaggregated by gender where applicable will compare project performance each year with the targets set in the Annual Work plan and Budget for that year. Outcome level indicators will be assessed through COI surveys to be carried out at baseline, midline and end-line. The Project will finance a baseline for monitoring project outcomes and impact.

242. **Project Indicators** – The Project will collect data on three main types of indicators:

- LF Core Indicators: these are standardized indicators that appear in all IFAD supported Projects and can be aggregated across Projects. Core Indicators are integrated in the AFAP-2 LF and can be recognized by the fact that they are preceded by numbers (e.g.

1.2.9 Households with improved nutrition Knowledge Attitudes and Practices - KAP)
These indicators can be at output and at outcome level.

- LF Project specific indicators: these are key indicators that appear in the LF and are specific to AFAP-2 and thus not aggregated at IFAD level across different Projects (e.g. Households reporting Increased fish catches per annum per commodity for VC developed). These indicators can be at output and at outcome level.
- Operational indicators: These are indicators that do not appear in the LF but which the Project will still collect and store in the MIS because they are useful for monitoring and managing the Project. Operational indicators are presented in the Results Framework (RF).

Table: Logical Framework Indicator

Indicator	Definition in the context of AFAP2
1 Persons receiving services promoted or supported by the project	Refers to the number of new individuals who have received services or participated to activities promoted or supported by the project during the considered period (annual reporting). Only new people are counted each year. If one person received different type of services during the reporting period, it should be counted only once to avoid double counting. If the same person receives services promoted or supported by the project over the years, it should only be counted once. If the project continues to work only with the same beneficiaries, communities and households, the annual value equals zero and the cumulative figure remains the same as the previous year.
1.b Estimated corresponding total number of household members	Refers to an estimate of the total number of persons in the households supported by the project (as reported under the previous indicator), during the considered reporting period (annual reporting). This estimate is based on the average number of persons per household recorded in the country or, if available, in the project intervention area. If neither direct measurement nor survey data are available, information is collected by project M&E staff based on national statistics (for data on average household size). It can also be estimated by multiplying the number of households reached by the project (indicated in CI 1.a) by the average household size in the project area. The indicator includes all household members, even those who did not receive project services (e.g. children).
1.a Corresponding number of households reached	Refers to the number of new households in which at least one member received services or participated in activities promoted or supported by the project, during the considered period (annual reporting). In the case of AFAP2, each direct recipient of services promoted by the project represents a household. Therefore, CI 1 = 1a. If by any chance two persons belonging to the same household (e.g. the husband and wife) have received direct project support, then this household should only be counted once for annual reporting.
Percentage of HHs reporting increased incomes	Refers to income of the project beneficiary households at a given time (e.g., at Baseline, Mid-Term, and at Completion). The objective of this indicator is to determine an increase in the average from the fisheries sector.
Prevalence of food insecurity reduced - Percentage (%)	Refers to the change in the proportion of individuals or households experiencing food insecurity within the target population over a the 8 years project period.
IE.2.1 Individuals demonstrating improvement empowerment an in	IFAD’s empowerment indicator aims at measuring individuals empowerment in the communities where IFAD’s projects are implemented, in the domains relevant to IFAD’s operations. IE 2.1 includes 10 out of the 12 dimensions for the pro-WEAI, focusing on those IFAD can influence through its supported activities. Each dimension is mapped to one of three domains of empowerment: intrinsic agency (power within), instrumental agency (power

Indicator	Definition in the context of AFAP2
	<p>to), and collective agency (power with) which are linked to the definition of empowerment.</p> <p>Dimensions' mapping is as follows:</p> <p>Intrinsic agency: Autonomy in income, Self-efficacy and Attitudes about intimate partner violence.</p> <p>Instrumental agency: Input in productive decisions, Ownership of land and other assets, Access to and decisions on financial services (if any provided by IFAD supported project), Control over use of income and Work balance. □ Collective agency: Group membership and Membership in influential groups.</p> <p>The indicator must be disaggregated by sex in order to compare empowerment between women and men.</p>
<p>1.2.9 Households with improved nutrition Knowledge Attitudes and Practices (KAP)</p>	<p>Households who have acquired new knowledge and have adopted good attitudes and practices (KAP) on nutrition. This indicator is relevant when a project includes nutrition education, counselling, behaviour change communication, mass media message transmission on nutrition, cooking demonstration etc. It is a measurement of change in targeted behaviours that have negative impacts on nutrition as determined by a nutrition situation analysis. These include, improvement in water sanitation and hygiene, improvement of child feeding practices, micronutrients intake, food safety and culture among others. These practices may vary based on context.</p> <p>The indicator only applies to beneficiary households which participated in any project-supported activity designed to help improve nutrition. Data is collected through COI survey conducted at Baseline, Mid-Term and Completion. Based on the answers of each selected components, a KAP score is calculated and is expressed as a percentage. 1 point is assigned to each adequate answer and the total number of points for each component is converted into a percentage. The final KAP score corresponds to the mean of each component's score. Equal weight is thus applied to each component (unless specified and justified otherwise in the design document). If the KAP score is a MINIMUM of 60%, then the household is expected to have reached the requirements for improved nutrition KAP. Refer to the <i>COI Measurement Guidelines</i>.</p>
<p>3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices</p>	<p>Project beneficiaries who were trained in environmentally sustainable practices and/or the management of climate-related risks, and who claim that: (a) they have fully mastered these practices; and (b) they are now routinely using these technologies and practices. Data is collected through COI survey conducted at Baseline, Mid-Term and Completion.</p> <p>The indicator only applies to the beneficiaries who received support from the project for the adoption of environmentally sustainable and climate-resilient technologies and practices</p>
<p>SF.2.1 Households satisfied with project-supported services</p>	<p>Refers to Households reporting that they: (a) easily accessed or used the services provided by the public/private entities supported by the project, and (b) were satisfied with the quality of the services provided by the public/private entities supported by the project. The indicator aims at determining whether the main services delivered by the public/private entities supported by the project adequately meet target groups' productive/business/employment/livelihood needs. Data is collected through COI survey conducted at Baseline, Mid-Term and Completion. Households are considered satisfied with the services provided by the project if FOR EACH service they benefited from they managed to easily access/use it AND were satisfied with its quality.</p>
<p>Households reporting Increased fish catches per annum per commodity for VC developed</p>	<p>The indicator measures the percentage of households that reported an increase in fish catches per annum per commodity for VC developed. For AFAP2, the indicator refers to households engaged in Aquaculture, cage-culture, and inland fisheries supported by the project.</p>

Indicator	Definition in the context of AFAP2
Percentage increase in overall production of small-scale aquaculture operations due to improved management practices, better technologies, and access to resources	The indicator refers to households engaged in Aquaculture, cage-culture, and inland fisheries supported by the project, that reported an increase in overall production of small-scale aquaculture operations due to improved management practices, better technologies, and access to resources.
1.2.4 Households reporting an increase in production	Beneficiary households interviewed (e.g. fish farmers) who claim that project-supported activities (e.g. training, input provision) have helped them increase the quantity of fish catches as a result of better yields (i.e. quantity of quantity of fish catches per unit of water) or an increase in the volume of fish catches as compared to the pre-project situation. The indicator only applies to the beneficiaries who received project-supported activities in order to increase production (e.g. training, input provision). Data is collected through COI survey conducted at Baseline, Mid-Term and Completion.
1.2.2 Households reporting adoption of new/improved inputs, technologies or practices	Beneficiary households interviewed who claim that: (a) they are fully satisfied with the inputs, practices or techniques promoted; and (b) they are now using those inputs, practices and technologies instead of previous ones. The indicator only applies to the beneficiaries who received support from the project for the adoption of new/improved inputs, technologies or practices. Data is collected through COI survey conducted at Baseline, Mid-Term and Completion.
Percentage increase in the overall fish and fish species produced and harvested from artisanal fisheries (lagoons).	This indicator measures an increase in the quantity of fish (eg., Catch Per Unit Effort (kg/day/boat) expressed in Tons) and an increase in the species produced and harvested from artisanal fisheries activities (lagoons).
Percentage of households reporting Increase fish Processed per annum	Refers to household engaged in aquaculture, cage-culture and inland fisheries that report an increase in the quantity of fish processed in a given reporting period (one year).
1.1.8 Households provided with targeted support to improve their nutrition	<p>It refers to the number of people that have directly participated in project-supported activities designed to help improve nutrition during the considered period. For AFAP2, activities may include people participating in nutrition related trainings, exchange visits, integrated food production (e.g., Nutriponds), homestead food production (kitchen gardens), technical assistance on the use of inputs and technologies intended to improve nutrition outcomes (e.g. bio-fortified seeds, small livestock, labour-savings implements/technologies), socio-cultural related issues impacting on nutrition outcomes etc.</p> <p>Information will be collected by service providers or project staff in charge of the of nutrition programme or activities. Service providers' or staff records should also track the following data: date of activity, type of activity, total persons participating in the activity disaggregated by gender, age and indigenous people, and households reached, disaggregated by women headed households and non-women headed households. Data are collected by project M&E staff and recorded in the project M&E system.</p>
3.1.1 Groups supported to sustainably manage natural resources and climate-related risks	Refers to groups (whether formally registered or not, and also including indigenous peoples' communities) involved in the management of natural resources (e.g., water resources, forests, fishing grounds and other natural resources) for agricultural production that have received project support during the considered period, to improve the sustainability of services provided to the resource base and to manage climate-related risks. Natural resource management groups involved in promoting technologies and practices for environmental protection, combating deforestation and desertification, or promoting soil/water conservation initiatives to prevent or increase resilience to

Indicator	Definition in the context of AFAP2
	climate-related risks should also be considered. For AFAP2, it refers to groups engaged in Aquaculture, cage-culture, and inland fisheries (lagoons). Data are collected by project M&E staff and recorded in the project M&E system. For AFAP2 50 fisheries groups, 160 aquaculture groups, and 25 cage-aquaculture groups are envisaged.
Development of Lagoon Management plans	Refers to the Lagoon Management plans that will be developed to facilitate the sustainable utilization, conservation, and safeguarding of lagoons and their surrounding watersheds to enhance both local livelihoods and biodiversity conservation.
Number of Indigenous fishing practices supported	Refers to the number of “river-pool” systems supported by the project in the reporting period (usually one year).
1.1.3 Rural producers accessing production inputs and/or technological packages	Refers to fish farmers, or other rural producers who received support to access production inputs (e.g. chemical or organic fertilizers, pesticides, improved seeds, stocked livestock, veterinary medicines, etc.) or technological packages (e.g. processing equipment, fishing/farming tools, etc.) thanks to project interventions. Such inputs or technological packages and options may be provided on a free basis, or against some beneficiary contribution.
1.1.4 Persons trained in production practices and/or technologies	<p>Number of persons who have been trained at least once in improved or innovative production practices and technologies during the considered period (annual reporting).</p> <p>Training and capacity development may be provided in a variety of forms: participation in community mapping of natural resources, participation in a farmers’ field school, field demonstrations, training in livestock immunization, etc.;, and for various durations (a full day’s training conducted outside the trainees’ community, training of extension officers in a district centre; shorter sessions conducted within the trainees’ community/village, regular short classroom training, or on-the-job or in-field training.</p> <p>Training topics may concern crop production (e.g. cultivation practices, participatory varietal selections, use of improved seeds, soil fertility practices and technology, efficient water use, micro-irrigation, agroforestry practices, proper plant protection, or enhancing produce quality); livestock production (e.g. milking and milk handling, slaughtering, animal nutrition, disease prevention and veterinary practices, animal husbandry); or fish production (e.g. fish capture techniques, management of fish sanctuaries, fish farming). Training in the management of natural resources and climate-related risks (such as technologies and practices for environmental protection, combating deforestation and desertification, or promoting soil/water conservation initiatives) shall not be considered here.</p>
2.1.3 Rural producers’ organizations supported	First-level groups of farmers or other rural producers, whether formally registered or not, that have been newly formed or created, or strengthened with project support during the considered period, in order to enhance agricultural, livestock or fishery production, processing or marketing, and provide services to their members. These rural producers’ organizations should be distinguished from groups formed to manage natural resources (natural resource management groups are reported only under SO3). Data to be recorded by service providers, rural producers’ organizations themselves, or by project staff.
Number of fishponds constructed/rehabilitated	Refers to the number of community-based fish pond supported by the project AFAP2 in a given reporting period (one year). Overall, the project will support the construction of 6,000 fish ponds of 500 m ² each - about 1,200 fish ponds per Province), distributed among level 1 and 2 farmers.
Number of cages constructed/supported	Refers to the number of cages supported by AFAP2 in a given reporting period (one year) as part of cage aquaculture pilots in suitable lagoons

Indicator	Definition in the context of AFAP2
Number of extension staff recruited by the project	Refers to the number of new extension staff recruited by the GoA in a given reporting period (one year), as an effort to develop the inland fisheries extension service
Number of staff trained by the project in aquaculture and fisheries extension services	Refers to the number of government staff and extension workers trained in various intervention areas supported by the project, such as aquaculture and fisheries extension services, data collection and processing, NRM etc.
2.2.2 Supported rural enterprises reporting an increase in profit	Refers to Project-supported rural enterprises surveyed reporting an increase in profit over the considered period, as shown by sales, income and expenditure patterns. Profit is estimated by deducting all expenditures and recurrent costs from total income or sales. Data is collected through COI survey conducted at Baseline, Mid-Term and Completion.
2.2.1 Persons with new jobs/employment opportunities	Number of new full-time or recurrent seasonal on-farm and off-farm jobs created thanks to project activities since project start-up, either as independent individuals (self-employed) or as employees of micro, small and medium-sized enterprises. Jobs created within farmers' organizations that received project support are also included, but temporary jobs created for a limited period (e.g. for road construction) shall be excluded. Data is collected through COI survey conducted at Baseline, Mid-Term and Completion.
2.2.6 Households reporting improved physical access to markets, processing and storage facilities	Beneficiary households interviewed who claim that, as compared to the pre-project situation: (a) they can now more easily access the required market, processing or storage facilities (e.g., smart markets and smart kiosk); and that (b) these facilities are fully functional. Data is collected through COI survey conducted at Baseline, Mid-Term and Completion.
2.1.2 Persons trained in income-generating activities or business management	Persons who during the considered period, have received training in topics related to income-generating activities, including post-production handling, processing and marketing. Such activities include cheese-making, small-scale processing of fruit, meat and milk products, handicrafts, weaving, embroidery, knitting, tailoring, wool-spinning, conservation of agricultural products, agro-processing techniques, handling in compliance with safety (use of chemicals, pesticides) and other quality requirements, packaging, market information and procedures. Vocational training is also included (e.g. blacksmithing, carpentry, dress-making, tailoring, hairstyling, masonry, welding). Business management training includes organizational management, accounting and bookkeeping, cash flow management and marketing.
2.1.6 Market, processing or storage facilities constructed or rehabilitated	Market, processing or storage facilities that have been fully constructed or rehabilitated by the project during the considered period. Market facilities are the structures used to sell produce, such as marketplaces and shading structures. Processing facilities include equipment and machinery that are used for the transformation of agricultural produce (such as mills, hullers, shellers, extractors) where value is added. Storage facilities include structures used for mid- to long-term storage or preservation of produce. The facilities may be on-farm storage structures such as containers and small silos, or village/community facilities such as warehouses, granaries and large silos. AFAP2 will support the construction of smart markets and smart kiosks, where storage, processing and selling take place.
2.1.5 Roads constructed, rehabilitated or upgraded	The total length, in kilometres, of roads that have been fully constructed, rehabilitated or upgraded (e.g. from feeder road to asphalt road) by the project, during the past 12 months. All types of roads should be included, such as feeder, paved, primary, secondary or tertiary roads. Roads where construction/rehabilitation works have been started during the past 12 months but not yet completed should not be reported.

Indicator	Definition in the context of AFAP2
Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment	Refers to existing/new laws, regulations, policies or strategies supported by the project and have been proposed to policy makers for approval, ratification or amendment
SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers	Households that participate in project-supported groups/organizations reporting that: (a) they have influence over decisions taken in the project-supported group/organization in which they participate; and (b) the project-supported group/organization they participate in can influence decision-making of local authorities and project-supported service providers. Data is collected through COI survey conducted at Baseline, Mid-Term and Completion.
Policy 1 Policy-relevant knowledge products completed	Refers to Policy analyses, research papers, working papers, studies, strategies, pieces of legislation, by-laws or other policy-related material produced as part of the project's policy goals. Data for this indicator can be collected in the relevant legal in-country institutions or through qualitative surveys administered to relevant stakeholders.

243. **Results Framework (RF)** – The RF provides a list of indicators to be collected by the Project which are not listed in the LF. Remember that the LF is just a selection of key progress indicators, but the Project will need to collect a much larger range of indicators that are useful for project management as well as for evaluation. The RF is a flexible, living document. Indicators in this list can be added and removed as it seems best to the Project team. The RF will be finalised at start-up with engagement of the PMU.

244. **Data Collection** – Digital data collection at landing sites through KoboToolbox (Kobocollect) or any other remarkable web-based tool for data collection will be promoted, and AFAP2 will support IPA in delivering the necessary training and equipment to data collectors. All contracts and MoUs signed by the PMU will include details on implementing partners' data collection responsibilities. Data will be validated by IPA representation at the department of fisheries and aquaculture of the Directorate Agriculture, Fisheries and Livestock at provincial level, then it will be shared with the AFAP2 M&E officer, who manage it using the Project's own Management Information System (MIS).

245. Activities and output monitoring will concentrate on the financial and physical outputs of Project activities. Data on activities and outputs will be collected on a regular basis by different actors: i) directly by the PMU (for activities directly implemented by the PMU); ii) by implementing partners (NGOs, Service providers, etc.); iii) by CCPs (with data validation by fisheries extension service at local level); and iv) by other representatives of different groups of beneficiaries.

246. **Progress Reporting** – *Reporting on activities and outputs.* Annual and semi-annual reporting will be focused on assessing the achievement of physical and financial AWPB targets. IFAD supervision reports will focus both on the execution of AWPBs and on the achievement of LF/RF outputs and outcomes. Based on LF results, the Mid-Term Review and the Completion report will also assess the correctness of the Theory of Change.

247. **Baseline and Impact Evaluation** – Outcome monitoring will assess the use of outputs and measure their benefits at beneficiary level. Impact assessment will strive to measure the long-term effects of AFAP2 interventions on beneficiaries' livelihoods and on the environment. Data on outcomes and impact will be collected through a set of three surveys (baseline, mid- line, completion) conducted in the first, fourth, and last year of Project implementation, respectively. The baseline, mid-line and completion surveys will be conducted in alignment with the IFAD guidelines for the measurement of Core Indicators at

Outcome level (also called COI guidelines). The guidelines will be provided by IFAD, which will also offer support in ensuring that the surveys are carried out respecting the quality standards set out in the guidelines. The COI surveys are relatively large surveys, with a sample of 750 beneficiary households and 750 control group households). The three surveys use a panel structure, meaning that where possible, the same sample should be used for the three surveys. The questionnaire for these surveys is partly already developed, since the questions related to the Core Indicators are standard IFAD questions that should not be modified. ToRs for the baseline, survey are provided in appendix 7 of this report but will need to be adopted to the AFAP-II context by the M&E Officer. The project will also conduct annual outcome surveys after the MTR that will be complemented with other studies to ensure that there is annual outcome reporting.

248. The baseline survey will provide a benchmark against which to measure future progress, as well as important information on target communities to refine the targeting strategy. The mid-line survey will precede the Mid-Term Review (MTR) - which will be carried out in year 4 of project implementation - and will provide key information on what is working and what is not. The end-line survey will precede the Project Completion mission and provide key data on results that will feed into the Project Completion Report (PCR). Qualitative studies will deepen the understanding of quantitative data and will be conducted jointly by the M&E and KM functions.

249. The PCR will be prepared in the six months between Project completion and Project closure. It would be important to note that the PCR process will be led by IFAD as per the 2023 guidelines for completion reports and the government will provide key inputs preparation of the PCR, covering the elements described in the general conditions of the Financing Agreement. The M&E data collected over the Project implementation period, and in particular the three outcome surveys, will be used to assess the changes in the livelihoods of the target groups, and for sharing of lessons learned and good practices. The Project completion process will include reflection workshops where stakeholders will have the opportunity to evaluate the performance of the Project, identify success factors and areas of further interventions and discuss the way forward for sustainability.

250. **Management Information System** – AFAP-2 will develop its own MIS to facilitate the storage, analysis, and presentation of data. The MIS will be procured within the first year of the project. This MIS will be closed at project end, but the data bases generated by the systems will be stored at GEPE and IPA data storage systems. AFAP will also seek to find innovative means of electronic filing system in highly secure and durable servers within the GoA infrastructures to guarantee sustainability of project related information after project lifetime.

251. GIS- The project will hire a GIS specialist on a part-time, retainer basis to ensure that the project systematically collects all spatial indicators, perform quality assurance checks on the datasets, identify gaps in the data, provide recommendations, and cross-verify the geo-referenced data against the reported achievements in the project logframes. The GIS consultant will also provide capacity building to the PMU, especially the provincial M&E focal points, extension officers, and any other technical teams involved in either collecting or analysing geo-referenced data. The main goal here is to ensure that we are collecting accurate geo-referenced data and that it is accurately reported in the logframe. The project will also be expected to produce maps showing all the investments for AFAP-II. This is expected to start with the GIS consultant working closely with the Aquaculture expert who will be hired to undertake the aquaculture suitability mapping. This work will build on the work already conducted by the National Directorate of Aquaculture, which conducted some preliminary studies to identify and map aquaculture potential areas.

III.3: KNOWLEDGE MANAGEMENT, LEARNING AND COMMUNICATION

252. The KM officer will work in close collaboration with the M&E officer to ensure that M&E findings on project results are widely disseminated in a clear, synthesized, and interesting way and that knowledge products are backed up by solid M&E evidence. Field visits to collect stories by the KM officer will be also used for triangulating M&E data, and case studies will be used to deepen the understanding of factors contributing to successes and failures, and to enable full documentation of impact. KM activities will have the following objectives: (i) capitalizing on past and current experiences to support the project’s successful implementation; (ii) supporting policy engagement; (iii) supporting research and disseminating lessons for promoting the scaling up of innovations.; (iv) raising awareness on environmental and gender-related themes.

- a) Capitalizing on experiences. AFAP2 will first be a learning project, integrating lessons from AFAP and capitalizing on experiences from other African countries on equipping artisanal fishing boats and on promoting mariculture. Technical staff and extension officers will visit countries like Madagascar and Tanzania who are already engaged in promoting cultivation of mussels and seaweed.
- b) Policy engagement. Knowledge Management (KM) and communications be closely linked to the policy engagement objectives and will disseminate lessons learned from AFAP2 approaches, such as the fisheries co-management through CCPs and the impact of household methodologies. In addition, a newsletter will be set up to spread positive and negative lessons from AFAP2 implementation experience, supported by reliable evidence and analysis.
- c) Research and dissemination. The Project will collect its own lessons and disseminate these to relevant stakeholders through briefs, newsletters, and studies. KM will also aim at translating the findings of research supported by the Project into accessible knowledge products to be disseminated amongst fishermen and extension officers. iv. Raising awareness. Through radio, TV campaigns, and events organised in primary and secondary schools, AFAP2 will also promote a broader societal awareness of the importance of conserving inland natural resources. The Project will produce audio and visual material to communicate and build knowledge of farmers on aquaculture. The Project will also organise fish fairs for fishermen to show and promote their products and gain exposure to new technologies.

253. *Communication.* Success stories will be publicized through short (3-5 minutes) videos shared through Instagram, Facebook, and other social media. These videos will be produced by locally-recruited youth. AFAP2’s visibility will be enhanced through a website, as well as through social media accounts such as Twitter, Facebook, YouTube, and Instagram. To promote transparency and coordination, all relevant MIMAIP officers will be granted access rights to AFAP2 MIS. Project results will also be accessible to the general public and be visible on the AFAP2 website. The PMU M&E and KM unit will ensure that information on Project services and eligibility criteria reaches all farmers in a timely manner.

254. *Portfolio-wide KM.* KM activities will be conducted in synergy with those of other IFAD supported projects in the country, with monthly coordination meetings between the KM officers. The project will establish a digital library to store and promote accessibility of all project documents.

255. *Staffing and responsibilities.* KM will be a shared effort by all actors involved in the Project but will be the primary responsibility of the M&E unit, which will be staffed by an M&E and KM senior officer. The two staff will be involved in both M&E and KM, thereby ensuring that the KM and the M&E functions are conducted in synergy with each other. The expected results of such synergy are: (i) M&E findings on Project results are widely disseminated through KM products in a clear, synthesized, and interesting way; (ii) knowledge products are backed up by solid M&E evidence (and therefore, the M&E system collects all data necessary for the envisaged knowledge products to be developed); (iii) field visits to collect stories for

KM products are also used for triangulating M&E data, and the way around; (iv) case studies, stakeholder interviews and surveys, will be used to deepen the understanding of factors contributing to successes and failures, and to enable full documentation of impact.

256. *Knowledge Management plan.* The programme’s KM activities will be guided by a robust KM strategy and plan. Lessons learnt in implementation will be actively shared between countries, regions, districts and clusters. Semi-annual review meetings with national and provincial staff and implementing partners will be organised by PMU to discuss progress towards results in relation to each semi-annual progress report, the format of which will explicitly include a focus on lessons learnt in terms of challenges, good practices, etc.

257. A draft KM plan will be provided at start-up. The KM plan will then be completed and refined with support from IFAD. The KM strategy and plan will be validated by Project stakeholders through a national workshop. The workshop will be an opportunity to refine the thematic focus and dissemination strategy of policy relevant studies, but also to better understand the key information needs for AFAP2 to be successful.

III.4: FINANCIAL MANAGEMENT

Attached as a separate Financial Management Module of the PIM.

III.5: PROCUREMENT

ANNEX 8 TO THE PROJECT IMPLEMENTATION MANUAL (PIM): PROCUREMENT

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Introduction

This section of the PIM defines the operational basis for undertaking the procurement activities. The volume of the works contracts is predominant at 47.00%, followed by goods and services at 42.17%. The procurement of consultancy contracts is estimated at 10.83%.

The Procurement Activities under the Projects' Components

The project has three components, all of which include procurement activities and will be implemented through the PMU with the support of the Ministry of Fisheries and Marine Resources.

- Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems
- Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development
- Component 3: Institutional Strengthening, Policy Support and Project Management

Total AFAP-2 costs are set at US\$ 88.14 million over the seven-year Project implementation period. The Project will be financed through contributions from the following financiers: a) IFAD12 Performance-Based Allocation System (PBAS), with a loan of US\$36.7 million; b) IFAD12 Borrowed Resources Allocation Mechanism (BRAM), with a loan of US\$10.0 million; c) the European Union (EU), with a loan of US\$10.0 million. Domestic co-financing will include: a) GoA contribution of about US\$ 9 million (including waived duties and taxes, office space for the PMU at central and provincial level, contribution to salaries of the extension workers); b) private sector (enterprises, and other private entities), with an expected contribution of about US\$ 7.7 million; and c) beneficiaries, who are expected to provide about US\$ 5 million (through in-kind contributions). AFAP-2 financing strategy includes a financing gap of about US\$ 9.8 million; this will be covered with IFAD13 financing subject to internal procedures and subsequent Executive Board approval.

1 Applicable Procurement Rules

The project procurement shall be carried out according to the Law No. 41/20, of 23 December 2020 ("the Public Contracts Act") to the extent that it is consistent with the IFAD Project Procurement Guidelines and the procurement procedures elaborated in the IFAD Procurement Handbook, the Financing Agreement, and the Procurement Arrangements Letter. The law is supplemented by several Presidential directives. The law applies to Contracts for Goods, Public Works and the acquisition of services entered by Public Entities which benefit from funds from the General State budget. It also applies to Concessions and Public Private Partnerships (PPPs) as well as to contracts entered by the bodies of Defence, Security and Internal Order except for those which are declared secret. There is a procurement manual in place that breaks down the overall procurement process into a series of individual procedures. The IPA in the Ministry of Fisheries and Marine Resources will be the implementing agency for AFAP-2.

Based on the results of the procurement management assessment, the current organizational structure of Institute for the Development of Artisanal Fisheries and Aquaculture (IPA) was found appropriate to manage the new project, if the required mitigation measures are implemented to address identified weaknesses. IPA, as the implanting agency, needs to

improve on the following areas to ensure that value for money and quality are enhanced: a) procurement strategy and procurement planning process; b) contract management and administrative systems; c) procurement risk management; and d) procurement personnel capacity.

There are Standard Bidding Documents (SBDs) for national bidding with defined procurement processes and standard conditions of contract. Available procurement methods are set out clearly. The range of methods available provides an appropriate degree of options to ensure competition, fairness, transparency, integrity and value for money. The options available under the open advertised bidding method allow for simple and more complex procurements, including open international bidding. There are defined conditions under which less competitive and non-competitive methods may be used.

2 Procurement Methods, Thresholds and Prior Review

All project procurements shall be undertaken through open competitive bidding. The National Procurement Law and Regulations will govern all Programme procurements using National Standard Bidding documents which are supplemented /adapted to meet IFAD’s SECAP standards and grievance mechanisms and the IFAD’s Project Procurement Guidelines and IFAD Procurement Handbook. For ICB procurement method and the procurement of consultancy services, IFAD Standard Bidding document will be used. Small value goods may be procured under shopping procedures. Limited International Bidding (LIB) and procurement under Framework Agreements may also be used where appropriate.

2.1 Procurement Plans (PP)

The Procurement Arrangements Letter will specify the financial thresholds for the use of procurement methods and the prior review thresholds. The procurement plan developed in line with the AWPB will reflect the range of contract threshold values applicable. This shall apply to ICB as well as to other less competitive methods of procurement described in the procurement plan.

2.2 Contract Register (CR) and Contract Monitoring Tool (CMT)

AFAP-2 will be set up on the IFAD OPEN system and Contract Monitoring Tool (CMT) function of the IFAD Client Portal (ICP) from project start up, thus ensuring effective supervision and prior review of procurement processes by IFAD, as well as adequate contract monitoring within AFAP-2. The PMU will be responsible of keeping an updated record of all signed contracts from the start of the project until closure including MOU’s and, MOA’s.

2.3 Tabular Summary of Applicable Methods and Thresholds

The determination of procurement selection method thresholds and of prior review thresholds will be used to develop the initial 18-month procurement plan, and as a guidance for the Procurement Arrangement Letter. The consolidated findings for Pillar 3 and 4 in Part A were found to pose substantial risk with room for re-categorization to moderate if proposed mitigating actions are implemented. The IA can mitigate the risk posed by the two pillars by undertaking a training needs assessment, and based on the results of the assessment, mount a comprehensive training programme to provide the procurement cadre with skills and tools to conduct procurement; enroll project procurement staff in the Procurement training BUILDPROC funded and organized by IFAD and delivered by ITC-ILO; publicizing procurement opportunities and contract award information; engaging and sensitizing stakeholders on a regular basis and putting in place a system to measure and improve procurement and contracting practices. The thresholds in the procurement plan are based on the overall PRM

score for both Part A and B which returned a Substantial inherent risk. Below are the thresholds drawing on the overall PRM score:

Table 7: Procurement methods and thresholds for Goods, Works and Non-Consulting Services in US\$

Expenditure Category	Contract Value Threshold (USD)	Procurement/ Selection Method	Prior Review Thresholds
Works	≥ 500,000	ICB, Domestic preference allowed.	≥ 100,000
	< 500,000	NCB	
	≤ 175,000	Shopping	
	≤ 50,000	Community Procurement	All values
	For values indicated in the PAL with due justification subject to IFAD's NO under prior review or alternatively without prior IFAD's NO for low-value unforeseen purchases with the estimated cost as indicated in the PAL.		Direct Contracting
Goods	≥ 150,000	ICB, Domestic preference allowed.	≥ 50,000
	< 150,000	NCB	
	≤ 70,000	Shopping	
	For values indicated in the PAL with due justification subject to IFAD's NO under prior review or alternatively without prior IFAD's NO for low-value unforeseen purchases with the estimated cost as indicated in the PAL.		
	≤ 50,000	CQS and ICS	
Consulting Services and non-consulting services	< 80,000	LCS and FBS	≥ 30,000 for consulting firms; and ≥ 15,000 for Individual Consultants.
	≥ 80,000	QCBS	
	≥ 60,000	Shortlisting Shortlisting following a Request for Expression	

		of Interest is mandatory for all CQS and ICS procedures.	
	For values indicated in the PAL and in the PP with due justification	SSS	
	International Advertisement	International Advertisement is mandatory for consultancy contracts estimated to cost USD 100,000.	

≥ 100,000

2.4 Special Procurement Arrangements

In line with the General Conditions, procurement of goods, works and services for IFAD-financed projects shall be carried out according to the Borrower’s/ Recipient’s procurement regulations to the extent that they are consistent with the IFAD Guidelines. When applicable, each procurement plan should identify the procedures and methods that must be implemented by the Borrower/Recipient to ensure consistency with the IFAD Guidelines and the Procurement Handbook.

The procurement assessment found that the risk level was substantial. Accordingly, the AFAP-2 procurement of goods, works and services will be carried out using the national procurement law with the addition that it shall comply with IFAD requirements to be specified in the Financing Agreement and the Procurement Arrangements. In cases of contradictions between IFAD Procurement Guidelines and the national procurement law, IFAD Procurement Guidelines will take precedence and govern.

Due to the weaknesses noted in the national legal framework, procurement under international competitive bidding and the procurement of consultancy services will specifically use IFAD procedures and IFAD standard bidding documents.

Contracts for low value items (for operational expenditure) will be procured through local administrative procedures acceptable to IFAD. The expenditure plan under this category will be submitted annually to IFAD for review and no objection through the AWPB. Proper records/files of all such purchases shall be maintained and will be subject to external audit.

2.5 Standard Procurement Documents (SPD)

National SBDs will be used and will be amended for consistency with IFAD Guidelines. The SBDs will include provisions on IFAD's Policy on Preventing Fraud and Corruption, the IFAD policy to preventing and responding to sexual harassment, sexual exploitation and abuse, the Anti-Money Laundering and Countering the Financing of Terrorism Policy, and IFAD’s Social, Environmental and Climate Assessment Procedures (SECAP), and IFAD right to audit. International procurements will use IFAD SBDs and provisions.

In view of the assessment of the national legal framework, below are the provisions of the law in Article 67 regarding bidding period to be applied to selection methods:

“The public contracting entity shall establish, in the announcement and the bid tender program or in the invitation, the date and time the timeframe for the presentation of the bids end, which shall take into consideration the time required for its production, in accordance with the nature, characteristics, volume, complexity of the contractual services, object of the contract, to be executed”.

The timeframe for the presentation of bids shall follow the IFAD Guidelines minimum at least 30 days for NCB and 45 days for ICB to allow the appropriate and effective conditions of the competition.

The applicable bid validity period shall be at least 90 days for national competitive bidding and 120 days for International Competitive bidding.

2.6 Guidance Offered in the IFAD Procurement Handbook

2.6.1 Application of the Handbook

The handbook applies to any procurement activity undertaken by a borrower/recipient when procuring goods, works or services under any IFAD-financed operation, and when the applicable agreement so provides. Consistent application of the handbook’s provisions and procedures is essential for ensuring greater efficiency, transparency, uniformity of documents and decisions and lower procurement costs.

2.6.2 Key Provisions of the Handbook

The procurement of goods, works and services for any given project should adhere to the following general provisions:

- i) Procurement is to be carried out in accordance with the financing agreement and the IFAD Project Procurement Guidelines, the respective loan agreement, including any duly agreed amendments thereto, and the borrower’s/ recipient’s procurement regulations and/or this handbook, as applicable.
- ii) The cost of procurement may not exceed the availability of duly allocated funds, as stated in the financing agreement.
- iii) Procurement must be consistent with the duly approved annual work plan and budget (AWPB) and in accordance with the activities included in the procurement plan.
- iv) Procurement must be well-organized and properly carried out in terms of quantity, quality and timeliness, and at the optimum price.
- v) Processes must be proportionate to the procurement activity to minimize the overall cost of the procurement process and tailor it to the budget for the activity undertaken.

2.7 Prior Review Documentation

2.7.1 Procurement Plan (PP)

Procurement Plans submitted as part of Annual Work Plans and Budget and any subsequent amendment of these PP’s.

2.7.2 The General Procurement Notice(s) (GPN)

The GPN publication and the text of the advertisement including key contracts incorporated in the Procurement Plan like all ICB contracts for goods and works as well as all consultancy contracts of interest to the international business community publicized through the GPN as soon as the Financing Agreement is signed and subsequently ratified.

2.7.3 ICB/NCB (Goods, Works, Non-Consulting Services)

The following procurement decisions shall be subject to prior review by the IFAD for the award of any contract for Goods, Works, Non-Consulting Services under the Project:

- Prequalification documents and shortlist when prequalification is undertaken;
- Technical Specifications for Goods/Works/NCS
- Draft bidding document, and draft procurement notice;
- Amendments to the Bidding Documents and RFPs, CfPs
- Evaluation report and supporting documents including Composition of evaluation committees; and
- Draft contract and the minutes of contract negotiation; Contract amendments, if any.
- Any other step as mentioned in Articles 8 of the PAL or its related amendment

2.7.4 Shopping (Goods, Works, Non-Consulting Services)

- Draft request for quotation;
- Quotation evaluation report and supporting documents;
- Draft contract/purchase order
- Any other step as mentioned in Articles 8 of the PAL or its related amendment

2.7.5 Consulting Services: QCBS, QBS, FBS, and LCS

The following procurement decisions shall be subject to prior review by the IFAD for the award of any contract for consultancy and services under the Project:

- The draft Term of Reference (TOR), and the draft request for expression of interest (REOI);
- The EOI evaluation report, the shortlist and supporting documents when prequalification is undertaken;
- Draft request for proposal;
- Amendment to the bidding documents and RFPs, CfPs;
- Technical evaluation report and supporting documents including composition of evaluation committees;
- Combined (technical and financial) evaluation report and supporting documents; and
- Draft contract and the minutes of contract negotiation; Contract amendments if any.
- Any other step as mentioned in Articles 8 of the PAL or its related amendment.

2.7.6 Consulting Services: CQS and ICS

- The draft Term of Reference (TOR), and the draft request for expression of interest (REOI);
- The EOI evaluation report, the shortlist and supporting documents

- “Prior lists” for shortlisting consultants
- The EOI evaluation report, the shortlist and supporting documents,
- Draft contract and the minutes of contract negotiation;
- Contract amendments, if any.
- Any other step as mentioned in Articles 8 of the PAL or its related amendment.

2.7.7 Direct Contracting and Single Source Selection

Direct Contracting: applies to the indicated contracts in the Procurement Plan with due justification (as mentioned in the Handbook) subject to IFAD’s NO under prior review or alternatively without prior IFAD’s NO for low-value unforeseen purchases with estimated cost per each purchase of US\$200 or less up to an aggregate amount of US\$2000 per annum.

2.7.8 Force Account

The use of force account is not allowed or not applicable.

2.7.9 Procurement from United Nations Agencies

Procurement from UN Agencies is allowed under this project.

2.7.10 Community Participation

Community Participation is applicable.

2.7.11 Secondary Procurement

Secondary Procurement (orders against existing Long-term Agreements initially procured competitively, national e-catalogues etc.) follows the regulations and applicable thresholds of the national legislation. The prior review threshold of the respective procurement category (goods, works, consulting services and related non-consulting services) applies.

2.7.11 Other specific Prior Review requirements

A contract whose cost estimate was below IFAD’s prior review threshold indicated in the Procurement Plan shall fall under prior review if the price of the lowest evaluated bidder exceeds such threshold. All related procurement documentation already processed, including the evaluation report and recommendation for award, shall be submitted to IFAD for its prior review and no objection before the award of contract.

If after publication of the award the Borrower receives protests or complaints from bidders, a copy of the complaint, the Borrower’s comments on each issue raised in the complaint, and a copy of the Borrower’s response shall be sent to IFAD for its review and comments.

There may be cases where the procurement process does not result in contract award. In such situations, the borrower may recommend (i) cancellation and rebidding, or (ii) price negotiation with the lowest evaluated substantially responsive bidder. These recommendations are subject to IFAD’s prior review and issuance of no-objection.

2.8 Other procurement-related coordination with IFAD

The borrower shall inform IFAD of the independent and competent national or local authority (or authorities, if the activities that follow fall under the jurisdiction of more than one authority) to be responsible for receiving, reviewing and investigating allegations of fraud and corruption relating to IFAD-financed and/or IFAD-managed activities and operations;

The borrower shall also provide the name(s), position(s) and contact information of a focal point within that authority (or those authorities, as appropriate) and inform IFAD of any potential changes of that focal point.

Pursuant to Section 8.06. of the General Conditions, the Borrower/Recipient and Project Parties shall promptly inform the Fund of any non-compliance with the IFAD Policy on sexual harassment, sexual exploitation and abuse.

3 Critical Procurement Issues

3.1 Areas of Inconsistency between National Law and IFAD Project Procurement Guidelines

For cases where there may be inconsistencies between the national law and the IFAD Project Procurement Guidelines and the procurement procedures elaborated in the IFAD Procurement Handbook, the Financing Agreement and the Procurement Arrangements Letter, the provisions of the IFAD Procurement Guidelines and procedures will take precedence.

Deviations in procurement methods between the Angolan and IFAD are summarized in the Table below:

IFAD equivalent method	Angola	Minimum time limits	Legal base (Angola)	IFAD Minimum time Limits
Open Competitive Bidding	Open Tender (Concurso Público)	20 -120 days		Min 30 days (NCB); Min 45 days (ICB)
Limited International Bidding	Limited Tender (Concurso Limitado por Prévia Qualificação)	Request for participation: deadline freely set by the PEs Proposal: 20 - 120 days	Request for participation: Article 125 of the PPL Proposal: Article 132 (2) (f); Article 65 of the PPL	As for ICB
N/A	Electronic Dynamic Purchasing Systems (Procedimento de Aquisição Dinâmico Electrónico)	4 hours (up to 18.000.000 AOA) 3 days (up to 72.000.000 AOA) 10 days (up to 182.000.000 AOA)	Article 150 (1) of the PPL Article 150 (2) of the PPL Article 150 (3) of the PPL	N/A
Restricted Tendering	Restricted Tender (Concurso Limitado por Convite)	6 days	Article 136 (3) (d); 138 of the PPL	21 days
14Direct Procurement/SSS	Direct Award (Contratação Simplificada)	No prescribed period	Article 142 (2) (d)	14 days

	Emergency Procurement (Contratação Emergencial)	No prescribed period	Article 148 of the PPL	n/a
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3.1.1 Comparison between National and IFAD Procurement

The following IFAD policies and procedures which are missing in the National Procurement system will be incorporated in the National Standard Bidding Document when they are to be used:

- policies on anticorruption and sexual harassment exploitation and abuse.
- policy on the Anti-Money Laundering and Countering the Financing of Terrorism.
- template for bidder’s self-certification.
- Social, Environmental and Climate Assessment Procedures (SECAP).

Other Inconsistencies between the national procurement system and the IFAD Framework include:

- There are no specific timelines provided for each of the procurement methods in the national rules. The timelines are provided in times of a range without specifying the selection methods (between 20 days and 120 days); IFAD follows international best practice of at least 30 days for RFP, NCB and 45 days for ICB;
- Bid validity period required is 60 days irrespective of selection method; IFAD bid validity is at least 90 days for ICB and at least 120 days for ICB;
- the procurement framework does not allow public to participate in public procurement phases other than bid opening;
- The national procurement framework does not provide secure mechanism for the public to report cases of anti-ethical and illicit practices unlike under IFAD rules which provides a dedicated website through which unethical conduct can be disclosed;
- Unlike in the IFAD rules where adequate time is required for bids to be provided with clarifications, there is no provision for seeking clarifications when selection through RFQ method;
- Unlike under IFAD, Standard Bidding Documents for use in ICB and consultancy services are not yet available under the National procurement framework;
- there is no requirement in the national law to publish NOITA unlike under IFAD;
- While suppliers are required to self-certify under IFAD rules, there is no similar requirement under the national procurement law;
- The national procurement law provides that bids are open the next business day after the submission date and, if justified, the opening session can occur within 10 days of the initial date. This is unlike under IFAD where opening is required immediately after bid submission deadline;
- there are no established thresholds for contract amendment approvals under the national procurement law unlike under IFAD which imposes a ceiling of 10% of the initial contract value.
- absence of an end-to-end procurement system.

In spite of the above gaps, the national rules provide for wide publication of tender documents on various media, the procedures provide for adequate competition, there are clear instructions on how bids should be submitted. The methods to be used in the evaluation of bids and award of contracts are objective and made known to bidders in advance.

Conclusion

To address the inconsistencies identified above, the national public procurement legal framework will be used for the project procurement with the addition that it shall comply with IFAD Procurement Guidelines and Procurement Handbook and requirements to be specified in the Financing Agreement and the Procurement Arrangements Letter. The national bidding documents shall be adjusted to include mandatory references to IFAD’s policies concerning fraud and corruption, sexual harassment, exploitation and abuse and money laundering & terrorist financing. The projects’ processes related to the procurement of goods and services shall include SECAP requirements in technical specifications, bidder’s qualifications, bid evaluation criteria and in contract clause as per the guidance in the SECAP list relevant to procurement. The Project will use the IFAD OPEN system to process procurement activities.

Risks identified during project design should be monitored throughout the life of the project to ensure that mitigation actions identified are implemented and any new risks are assessed and treated appropriately.

3.2 Cost and Schedule Estimate

Estimated costs of the project components and proposed contract packages should be based on detailed, accurate, and reliable quantities and unit rates, as accurate cost estimates are essential to an effective procurement plan and will reduce the risk of unsuccessful procurement and corresponding delay in project implementation.

3.3 Publication of Notices

Notices for NCB and ICB contracts shall be published in at least one newspaper with national circulation in the borrower/recipient country and published on the United Nations Development Business website and on the IFAD website.

3.4 Award of Grants/Loans

3.4.1 Selection of Grant or Refinancing Partners

The Project Implementation Manual (PIM) will include a Financial Management Section and a Grant Implementation Manual/Guidelines outlining how the grants will be implemented.

3.4.2 Grant Beneficiary Selection

The Grant Beneficiary Selection will be based on the eligibility criteria and procedures elaborated in the Grant Implementation Manual/Guidelines. The project will provide the selection criteria in all grant announcements. Grant schemes awards will be subject to IFAD review and No Objection.

3.4.3 Micro-credit Financing

In the case of Micro-credit Financing, the intermediary should be properly registered with the authority to receive and account for funds, and to administer procurement reliably in accordance with established commercial practices acceptable to the Fund. However, even in these situations, open competition may be the most appropriate procurement method for the purchase of large single items or in cases where large quantities of like goods can be grouped together for bulk purchasing.

3.5 Procurement Principles and Ethics

The Procurement of goods and services shall be conducted by competitive methods, promoting transparency and accountability in the processes and fair and equal opportunities

for bidders. The processes must foster integrity, efficiency, effectiveness and economy, and achieve value for money by obtaining the desired quality of services, supplies and/or works at the best price-quality ratio.

No person or entity shall use, or attempt to use, his, her or its authority, position or office for personal gain or interest, which is defined as soliciting, accepting or otherwise benefiting from anything of material value in any form, either in person or indirectly through close relatives or associates, in connection with IFAD-financed operations

3.6 Combatting Corruption and Sexual Harassment

The project will adapt all bidding documents to include mandatory references to the IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations and with its Policy on Preventing and Responding to Sexual Harassment, Sexual Exploitation and Abuse, and IFAD’s Anti-Money Laundering and Countering the Financing of Terrorism Policy.

The Anticorruption Policy is available at: <https://www.ifad.org/en/document-detail/asset/40189695>

The SH/SEA Policy at: <https://www.ifad.org/en/document-detail/asset/40738506>

3.7 Record Keeping

Procurement records shall be kept orderly in file records in shelves or other safe place, but preferably the procurement records shall be saved orderly electronically and uploaded to the cloud or other safe electronic environment (including a protected in-house server). Paper file records should not be cramped. Excess papers shall be kept in additional volumes in one or more additional lever- arch folders and in chronological order. Bids and proposals submitted by bidders may be left out of the lever arch file and kept in appropriately labelled box files. Lever arch folders should have a side label and a file index. The procurement file shall contain the documents as required in Module B of the IFAD Procurement Handbook.

4 Procurement Transactions – Institutional Setup and RACI

4.1 Delegated Procurement Responsibilities to local entities

The procurement function will be centralized at the AFAP-2 Secretariat.

4.2 Implementing Partners

MOUs will be signed with the Angola Commercial Agricultural Project, Agricultural Value Chains Development Project, SREP and SADCP – C&H.

4.3 Accounting for Procurement by Local Entities and Partners

Local procurement entities account for procurement activities and actions to AFAP-2 and the Procurement Regulation Authority (SNCP).

4.3 Institutional Setup, Roles and Responsibilities

The implementation period of AFAP-2 is 8 years. All procurement activities will be conducted by Institute of Fisheries (IPA) through the Project Management Unit (PMU). IPA will assign to the Project Management Unit (PMU) the responsibilities of programming, budgeting, and

allocation of resources for the project. The PMU will be responsible for oversight of the IFAD portfolio utilizing a programme approach. The PMU will assure efficiency of certain key functions such as procurement, M&E and knowledge management, and will make use of systems which are constantly updated in line with international best practices and tools offered by IFAD and will ensure proper start-up of the project as well as capacity building. The PMU will ensure recruitment of an appropriate Procurement officer and a Procurement assistant responsible for management and implementation of procurement activities.

4.4.1 Evaluation Committees

The evaluation shall be carried out by an Ad hoc Evaluation Committee of at least three members and an odd number. The Evaluation Committee shall, wherever possible, include at least one member with the technical knowledge and experience related to the type of procurement, and may include external experts depending on the complexity of the requirements and the risks involved.

Anyone involved in authorizing, clearing or approving evaluations or evaluation reports – such as the procuring entity’s authorizing officer or the head of the project coordination unit/project implementation unit/project management unit – is precluded from membership in the TEC because of a perceived, potential or actual conflict of interest. Persons who participate in the preparation of the procurement documents generally have conflicts of interest and may not therefore be allowed to participate in the TEC for such procurement activities.

4.4.2 IFAD-funded PMU staff selection

Staff members will be recruited as individual consultants through a competitive selection process.

4.4.3 Roles & Responsibilities

The Procurement Unit staff will be responsible for:

- Preparation of the annual project procurement plan including any subsequent revision of it, in line with the AWBP, and submit it in time for IFAD’s review;
- Supervision of the execution of the procurement activities through the full procurement cycle: AWPB preparation, procurement planning, tender management, contract management and administration at the PMU and provincial level and report directly to the Project Manager;
- Liaising with the various stakeholders and beneficiaries to ensure timely execution of the procurement activities;
- Managing the implementation of all the procurement activities up to the conclusion of the contract;
- Preparing and request IFAD’s No Objection for cases requiring its prior review;
- Ensuring the contract management register is updated and maintained regularly;
- Managing the OPEN system and related procurement operations;
- Maintaining adequate records and filing for each project procurement case.

The Project Manager shall be responsible for the technical coordination of all user units which are responsible for preparing the terms of reference and technical specifications for the acquisition of goods and works. The Project Manager is responsible for the approval of the ToR and technical specifications. The Director General of IPA will approve the procurement

plan, bidding documents and procurement notices, evaluation reports, negotiation minutes and the draft contract and will also consider and approve all contract amendments.

One Procurement Officer and a Procurement Assistant will be recruited through a competitive process.

Terms of References

Position: Procurement Officer

The Procurement Officer, in collaboration with other PMU staff, will be responsible for carrying out procurement planning and implementation ensuring that sound procurement practices are applied consistently as prescribed by the relevant national laws, regulations and policy documents and in accordance with the provisions of the Financing Agreement with IFAD and the Procurement Arrangements Letter, IFAD's Procurement Guidelines and Procurement Handbook.

The duration of the contract is two (2) years with possible extensions subject to satisfactory performance. The Procurement Officer will report to the Project Manager.

Roles and responsibilities:

- As part of the PIU management team, and in collaboration with the Project Manager and the technical and finance staff, participate in the formulation AWPBs and provide inputs on procurement.
- Prepare the Procurement Plan for submission to IFAD for review and no objection, and to the IDEPA Director General for approval.
- Update the procurement plans as needed for submission to IFAD for review and no objection, and to the IDEPA Director General for approval;
- Identify sources of supply, evaluate supplier eligibility and maintain a list of pre-qualified suppliers/contractors
- Undertake the procurement of goods, works and services in compliance with the IFAD project procurement guidelines, the PIM and the project procurement manual.
- Organize meetings for Bids opening and tender evaluations, and maintain record of minutes of the proceedings, decisions and agreed actions.
- Provide training and assist PMU staff and the implementing agencies to prepare the procurement documents and ensure that appropriate procurement process and procedures are followed in compliance with the IFAD project procurement guidelines, the PIM and the project procurement manual.
- Draft Contract Documents and follow up on the contracts signing process.
- Supervise the process and procedures of contract management of the goods, works and services procured by the implementing agencies to ensure compliance with the IFAD project procurement guidelines, the PIM and the project procurement manual.
- Update regularly "actual" against "plan" procurement data and information in the procurement plan and monitor procurement progress towards the achievement of procurement schedules;
- Manage the OPEN system and regularly update the contract monitoring tool (CMT).
- Prepare a Procurement progress report at the end of month and no later than 15th day of the following month, for submission to the Project Manager.
- Work closely with E&S Safeguards Specialist to ensure that environmental and safeguard requirements are incorporated into the project procurement plans.
- Maintain all procurement records in a form appropriate for regular auditing and spot checks by supervision missions

- Maintain and keep all records of project procurement and contract documents at the PMU in appropriate files.
- Follow up on any issues related to Procurement, identified in the Supervision Mission Report and Audit Report.
- Advise and propose mitigation measures for non-performance of contracts and report any identifiable indicators of fraud, collusion and other unethical practices in procurement and contracting process.

Qualifications, experience and competences

- At least a bachelors' degree qualification in public procurement, supply chain management, logistics, economics, business administration, engineering, project management, law or a related field.
- At least five years of relevant working experience.
- Experience working with national procurement regulations.
- Knowledge and experience of procurement rules and procedures of multilateral donor institutions (IFAD, AFDB, WB, EU, USAID, DFID, UN, etc).
- Experience in preparing tender and contract documents for national and international competitive bidding
- Computer proficiency in Windows, MS Office, Excel, and Power Point and internet.
- Good analytical, negotiation, communication and report writing skills.
- Ability to work in a team.

Position: Procurement Assistant

The Procurement Assistant will support the procurement of goods, works and services to ensure transparent and efficient procurement services and processes in the AFAP-22 procurement.

The duration of the contract is two (2) years with possible extensions subject to satisfactory performance. The Procurement Assistant will report to the Procurement Officer.

Roles and responsibilities:

- Assist in the preparation of the procurement plan and bidding documents.
- Procurement of office stationery and consumables, hotel reservations and arrangements of conferences and trainings, arrangements of international travels and local transportation.
- Assist the Procurement Officer with Secretariat roles during tendering processes
- Prepare purchase orders for contracting of goods, works and services.
- Prepare draft procurement correspondence.
- In collaboration with user units, participate in receiving and checking the conformity of goods and services.
- Ensure project assets are tagged.
- assist the Procurement officer in maintaining all procurement records in a form appropriate for regular auditing and spot checks by supervision missions
- Ensure safe storage of tenders in response to bidding processes.
- Perform any other tasks required by the project as requested by the supervisor.

Qualifications, experience and competences:

- At least a bachelor's degree in commerce or business administration, with a major in procurement/supply chain management or logistics with two years of working experience

in procurement or a Diploma in a procurement related field, with at least three years' experience in procurement.

- Working knowledge of GoA procurement regulations and procedures.
- Experience in procurement procedures of multilateral donor organizations will be an added advantage.
- Computer proficiency in Windows, MS Office, Excel, and Power Point and internet.
- Ability to find, evaluate and engage suppliers of goods, works and services.
- Ability to work as part of a team.

Annex 1: Responsibility Assignment Matrix (RAM - RACI) Template

Responsibility Matrix for the preparation of the procurement part of IFAD's PDR

SPO	IFAD Proc. Specialist/consultant	CD or CPM	OPR	National Stakeholders	ESS Specialist/s	IA of Beneficiary Government
A	R	C	C	C and I	C	C and I

Where:

A stands for oversight / approval and accountability for finalization of the PDR for DRM submission

R stands for responsibility to conduct the task

C stands for the need to consult with this party

I stands for the party being informed about the conduct and result of the project's procurement design tasks.

Annex 2: Procurement Records and Files

The project shall maintain the following records:

- (i) a copy of the published REOI advertisement or shortlist (if applicable);
- (ii) a copy of the published pre-qualification and bidding documents and any amendments, extensions or clarifications requested and issued;
- (iii) a record of the tender opening, signed by all TEC members and the bidders present;
- (iv) a full copy of each bid received and evaluated, plus clarifications requested and responses received;
- (v) a copy of the evaluation report;
- (vi) signed minutes of all meetings related to the procurement, including pre-bid and negotiation meetings, when held;
- (vii) a contract award notice;
- (viii) any letter of tender acceptance to the supplier, contractor or consultant ;
- (ix) the signed contract document and contract acceptance;
- (x) any contract amendments;
- (xi) all contractual correspondence between the procuring entity and a supplier, contractor or consultant;
- (xii) post-contract documents related to the fulfilment of contract obligations, especially photocopies of bank guarantees or payment guarantees;

- (xiii) signed minutes of any meetings related to contract management, including contract progress or review meetings;
- (xiv) signed delivery documents evidencing delivery of supplies, or signed completion certificates related to a contract for services or works under the contract, including any contract delivery records;
- (xv) a copy of all invoices for works, services or supplies, including working papers verifying the accuracy of payments claimed and details of the actual payment authorized;
- (xvi) a copy of cumulative payment worksheets/records evidencing management of all payments made;
- (xvii) all decisions of the concerned borrower's approval authority related to the procurement, including the approval of the bidding documents, the approval of the evaluation report(s), the contract award, the approval of contract documents and contract amendments and any decision to suspend or cancel procurement proceedings;
- (xviii) a copy of any claims made by the procuring entity with respect to any warranty, non-warranty, short supply, damage and other claims against the contracted vendor or the procuring entity;
- (xix) in the case of IFAD prior review, all submissions and correspondence related to the seeking of IFAD's no objection (NO) and a copy of the respective IFAD NO letter; and
- (xx) any other communications related to the procurement in question, including internal entity correspondence.

Annex 3: Guidance on using OPEN End-to-End Project Procurement System

IFAD requires all Borrowers to publish their Procurement Plans in IFAD's online "OPEN End-to-End Project Procurement System" (OPEN). The OPEN system is a single interface system that links all procurement systems in one from planning to acceptance of contract deliverables thus covering complete procurement processes and cycle while voiding duplication of efforts.

The system supports borrowers plan, record, and track key stages of the procurement processes. It is a requirement for IFAD Borrowers to use this system. However, the use of the OPEN system will only apply in instances where procurement activity is subject to prior review thresholds for the projects which are risk based and require IFAD to review and clear stages of the procurement.

It is worth noting that all procurement activities below the prior review thresholds will not be processed end-to-end in OPEN. For such procurement activities, it is expected that only the initial steps such as procurement item, cost estimate, procurement method and market approach and determination if or not an activity is subject to IFAD's prior review or not and in terms of selection of consultants the Terms of Reference (ToRs) will be approved by IFAD in OPEN. The rest of the selection or procurement steps will be subject to Procurement Post Review (PPR) or Audit by the Supreme Audit Institution (SAI) of the Borrower or any institution that would have been approved by IFAD.

The system incorporates built-in guidance for borrowers on how to conduct procurement activities from start to finish. It increases transparency and efficiency by streamlining workflows and automating processes and integrating procurement planning with the No

Objection Workflows. It also facilitates tracking of procurement activities and provides analytics and reports to support evidence-based management.

Annex 4: Vendor Assessment Form

PART I: COMPANY DETAILS AND GENERAL INFORMATION			
Name of Vendor			
Full Address and Contact Details of the Tenderer.		1. Country 2. City 3. Location 4. Building 5. Floor 6. Postal Address 7. Name and email of contact person.	
Current Trade License Registration Number and Expiring date			
Name, country and full address (<i>postal and physical addresses, email, and telephone number</i>) of Registering Body/Agency			
Description of Nature of Business			
Provide details of the senior management of the firm			
Sector of the Business			
PART II. FINANCIAL INFORMATION			
VAT Number		Tax Number	
Bank Name		Bank Account Number	
Bank Address		Account Name	
Swift/BIC number		Standard Payment Terms	
Has the company been audited in the last 3 years?			<input type="checkbox"/> Yes <input type="checkbox"/> No
Please attach a copy of the company's Annual or Audited Financial Reports for the last 3 years.			<input type="checkbox"/> Attached
Annual Value of Total Sales for the last 3 Years:			
Year:	USD:	Year:	USD:
Year:	USD:	Year:	USD:
PART III: VENDOR EXPERIENCE			
List the recent experience of your business with other companies, NGOs and International Organizations			

What is your business coverage area?	
Provide any other information that demonstrates your company’s qualifications and experience (awards, etc)	
List any national or international Trade/Professional Organizations of which your company is a member.	
PART IV: TECHNICAL CAPACITY	
Type of Quality Assurance Certificate	
Type of Certification/Qualification Document	
International Offices/Representation	
List the type of Goods that your company sells.	
List the main assets of your company (Transport equipment, warehouses, etc)	
PART V: MISCELLANEOUS	
Does your company have an Environmental Policy?, If yes, attach a copy	<input type="checkbox"/> Attached
Does your company have an ethical Trading Policy?, If yes, attach a copy	<input type="checkbox"/> Attached
Has your company been bankrupt, or is in the process of being wound up, having its affairs administered by the Courts, has entered into arrangements with creditors, has suspended business activities, is the subject of proceedings concerning these matters, or is in any analogous situation arising from a similar procedure provided for in national law? If yes, please provide details.	
Has your company been convicted of an offence concerning its professional conduct by a judgement which has force of law? If yes, provide details.	
Has your company been guilty of grave professional misconduct proven by other means? If yes, kindly explain.	
Has your company fulfilled obligations relating to the payment of its social security obligations and payment of taxes in the country in which it operates? If so, provide clearance certificate for the last most recent year.	
Has your company been declared to be in serious breach of contract for failure to comply with its contractual obligations, following any procurement procedure? If yes, provide details.	

Has your company ever been in any dispute with any Government Agency, the United Nations, or International Aid Organizations? If yes, provide details.	
Do you agree with terms of payment of 30 days?	
PART V: CERTIFICATION	
I certify that the information provided in this form is correct and describes our current business status.	
Name of Manager _____ Signature _____ _____ Date _____	
Affix company seal	

Annex 5: Debrief, Protest and Appeal Timeline

Debriefing

Any bidder that wishes to know why its bid or proposal was not selected may request an explanation from the procuring entity. As per Module Group L of the IFAD Procurement Handbook, the procuring entity will first have sent a notice that the evaluation is completed (via the notice of intent to award [NOITA]). After receiving this information, the unsuccessful bidder may request a debrief. The procuring entity shall promptly provide an explanation in writing of why the bid was not selected. The bidder may then request a meeting. If the procuring entity agrees to a meeting after providing the debrief, the bidder shall bear all the costs of attending the meeting.

The procuring entity shall provide the written debrief within four business days of the request. The debrief should indicate the stage of the evaluation at which the tender was rejected – i.e. the preliminary review, the detailed evaluation or the financial evaluation and the reasons for its rejection.

If the bid was rejected at the technical evaluation stage, only the details of the requesting bidder will be provided but the technical details of the other bidders will not be disclosed. The requesting bidder will be provided only with the technical evaluation summary of bidders who attained compliance.

Regarding the financial evaluation summary, the requesting bidder will only be provided with the evaluated price of the bidders and their rankings.

Protest and Appeals

1. The administrative appeal shall be put forward within 5 (five) days as from the notice on the act to be disputed, unless any other timeframe is stipulated in the Law.
2. The claims shall be addressed to the author of the act to be disputed.
3. The hierarchical appeals and the inappropriate hierarchical appeals shall be presented respectively to the hierarchical superior of the author or to the supervising body.
4. The interested party shall explain in the claim or petition for presentation of hierarchical appeal or also inappropriate hierarchical appeal, all the grounds for appeal and it may add the documents it deems required.
5. The hierarchical appeals and the inappropriate hierarchical appeals shall be presented before the public contracting entity, in hard copy or through the respective electronic platform, and shall always be accompanied by the duplicate addressed to the body responsible for regulating and supervising the public procurement.
6. The bodies, to which a hierarchical appeal or inappropriate hierarchical appeal are addressed, shall advise of the respective decision to the body responsible for regulating and supervising the public procurement on whether the appeal presented is founded or unfounded.

- 7.** The presentation of administrative appeal has no suspensive effect.
- 8.** As long as the administrative appeal is not decided or the timeframe for the respective decision has not elapsed, it is not possible to proceed, as the case may be, with the following:
 - a) Decision on qualification;
 - b) Commencement stage of the negotiation;
 - c) Decision on awarding;
 - d) Execution of the contract.
- 9.** When the administrative appeal has, as the object, the decision on the qualification or decision on the awarding, the competent body, to be aware of it, shall, within five days of the respective presentation, give notice to the candidates or competitors, should they like, to give an opinion within five days on the petition and its grounds.
- 10.** The administrative appeal shall be decided within five days of the date of presentation, and the silence shall be deemed as approved.
- 11.** Should there be hearing of counter-interested parties, the timeframe for the decision shall be from the end of the term established for that hearing.
- 12.** The interested entities, which, out of ill-faith resort to administrative appeal, rendering inoperative any phase of the procedure, shall be hereby forbidden to take part in any public contracting procedures, during a period of time of up to three years, established according to the seriousness of their conduct, estimated contract value and the losses they have caused.
- 13.** The competence to instruct and decide on the processes associated with the impediment enforcement as provided for in the preceding Paragraph falls under the body responsible for regulating and supervising the public contracting.
- 14.** The decisions put forward on the administrative appeal shall be susceptible to litigious appeal under the law.

Annex 6: The Project Procurement Strategy (PPS)

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- I) Project Overview
- II) Overview of Country, Borrower and Marketplace
- III) Procurement Risk Analysis
- IV) Procurement Objectives
- V) Recommended Procurement Approach for the Project Procurement Approach
- VI) Responsibility Matrix for development of the PPS
- VII) Lessons Learned and Challenges from Previous Projects Implemented

Abbreviations and Acronyms

AFAP-2	Artisanal Fisheries and Aquaculture Project Phase 2
AfDB	African Development Bank
BRAM	Borrowed Resources Allocation Mechanism
CCPs	Community Council of Fisheries
CMT	Contract Monitoring Tool
CPI	Corruption Perception Index
CQS	Selection Based on Consultants Qualifications
EU	European Union
FBS	Fixed Budget Selection
GDP	Gross Domestic Product
GoA	Government of Angola
IA	Implementing Agency
ICS	Individual Consultant Selection
IFAD	International Fund for Agricultural Development
IPA	Institute for the Development of Artisanal Fisheries and Aquaculture
LCS	Least Cost Selection
OPEN	IFAD OPEN end-to-end project procurement System
PMU	Project Management Unit
PP	Procurement Plan
PPS	Project procurement Strategy
PBAS	Performance-Based Allocation System
QBS	Quality Based Selection
QCBS	Quality and Cost Based Selection
SCU	Single Coordination Unit
SECAP	Social, Environmental and Climate Assessment Procedures
SNCP	Serviço Nacional da Contratação Publica
SOE	State Owned Enterprise
WB	World Bank

a) Key project information

Key project information is shown in Table 1.

Table 1: Project overview

Country	Angola
Full Project Name and Number:	ARTISANAL FISHERIES AND AQUACULTURE PROJECT Phase 2 (AFAP-2)
IFAD Loan / Grant amount (\$):	US\$ 90 million
Loan/Grant Number:	
Name of Procurement contract or group of similar contracts	<p>i) Works contracts: Rehabilitation of offices; construction of 200kms Last-mile roads; construction of 3000 community-group ponds; construction and installation of fish cages; and construction of water supply canal systems</p> <p>ii) Goods contracts: Procurement of office furniture, ICT equipment, vehicles, motor cycles, financial software, seeds for fish-crop integration system; procurement of sustainable fishing nets; procurement and distribution of surveillance equipment and tools; establishment of Food Security and Nutrition Information System (SISAN) at Provincial level; procurement and installation of solar lights and automatic feeders in cages; procurement of pond inputs for aquaculture farmers, and inputs for cage farmers and for inland fisher folk.</p> <p>iii) Consulting services: consulting services for undertaking baseline and feasibility surveys, development of lagoon management plans, fisheries studies, support to implementation of targeting and community mobilization, development of functional literacy tools, gender reviews and assessments, development and implementation of GALS approach; provision of technical assistance to anchor producers; development of private sector engagement strategy; development & adoption of a community-based fisheries production and management policy; consultancy for the establishment of policy guidelines for standardizing fish feed quality.</p>
Estimated Contract Cost (\$)	17,519,500.00

AFAP-2 is the second phase of AFAP 1 which implemented during the period 2015-2023. AFAP-2 intends to consolidate and scale-up AFAP's phase 1 achievements.

The project will target five districts namely, Bengo, Kwanza Norte, Malanje, Uige and Bie and is expected to directly target 31.000 households, equivalent to 148.000 people.

For all field activities, 40% of target households will be female-headed, 30% will be youth-headed, while the disabled and other vulnerable groups will account for 5%.

The goal of AFAP is to 'contribute to improved household income, food and nutrition security through sustainable and climate resilient fisheries and aquaculture'. The Project Development Objective (PDO) is to 'contribute to the reduction of rural poverty and food insecurity of smallholders in the target provinces by developing their economic potential while improving natural resources management capacity and resilience to climate change'.

The Project will be implemented over a seven-year period.

b) Project components and cost

The Project is expected to have three (3) components all of which include procurement activities and will be implemented through the PMU with the support of the IPA.

- Component 1: Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems
- Component 2: Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development
- Component 3: Institutional Strengthening, Policy Support and Project Management

AFAP-2 will be financed through contributions from the following sources: a) IFAD12 Performance-Based Allocation System (PBAS), with a loan of US\$36.7 million; b) IFAD12 Borrowed Resources Allocation Mechanism (BRAM), with a loan of US\$10.0 million; c) the European Union (EU), with a loan of US\$10.0 million. c) private sector (enterprises, and other private entities), with an expected contribution of about US\$ 7.7 million; and c) beneficiaries, who are expected to provide about US\$ 5 million (through in-kind contributions).

Out of the overall project costs, component 2; Business Enterprise, Market Linkages and Climate-Resilient Infrastructure Development has been allocated the biggest percentage of 43.6 percent, equivalent to US\$38.46 million. Component 1; Sustainable Inland Fisheries and Small-Scale Aquaculture Production Systems accounts for 32.2 percent equivalent to US\$28.534 million, while component 3; Institutional Strengthening, Policy Support and Project Management was allocated 24.2 per cent which is equivalent to US\$17.825 million.

c) Project duration

The Project will be implemented over a period seven (7) years through the Government of Angola. A Project Management Unit (PMU) will be established within the Ministry of Fisheries and Marine Resources to manage and implement the day-to-day aspects of the Project.

I) Overview of Country, Borrower and Marketplace

a) Operational Context

Angola covers an area of 1.25 million km² on the Atlantic coast of Africa. With a western coastline of 1,600 km, it is bordered by Congo (D.R.) to the north and east, Zambia to the east, and Namibia to the south. It has a population of about 35.6 million people as per the United Nations Data Portal ⁵⁵.

The country's terrain encompasses many rivers, lakes and humid areas that can be used to develop inland fisheries and aquaculture but remain economically under-exploited. Inland fisheries and aquaculture can become a viable means of providing quality protein for rural household consumption, sale of surplus products, and become an alternative source of employment and income, while contributing to reduce rural poverty and migration to urban areas.

A PESTLE analysis was undertaken to obtain a comprehensive understanding of the overall context of the macro business environment in which the IA and its potential suppliers are operating and to determine any external drivers of change specific to the project. A PESTLE analysis is essential in the development of the IA's procurement strategy with an optimal risk management approach that mitigates negative risks and build upon positive factors in the surrounding operational environment.

The following aspects were examined to identify the relevant factors that may impact the timely and effective delivery of the projects' procurement needs:

i) **GOVERNANCE ASPECTS**

The Republic of Angola is a unitary democratic state with separation of powers between the Executive, Legislative and Judicial arms of government. Angola is divided into 18 provinces, each of which is headed by a governor appointed by the central government. The Transparency International corruption perception index score for Angola was 33/100 (medium risk) which places the country in 116th position out of 180 countries in 2022. According to the Mo Ibrahim Index (2021), measuring governance performance Angola is a medium policy performer, ranked 40 out of 54 African countries showing a lower score than both the African average (48.9) and the regional average for Southern Africa (54.2). The Ibrahim Index of African Governance annually measures the quality of governance in 54 African countries by compiling statistical data from the previous year⁵⁶.

ii) **ECONOMIC ASPECTS**

The Angolan economy is dominated by the oil and gas industry, which accounts for about 50% of its GDP and is the primary source of revenue for the country. Growth accelerated in 2022 to 3% (from 1.2% in 2021) supported by improved oil production, and resilient non-oil activity. The income per capita has been gradually increasing, especially in the metropolitan regions, but poverty and unemployment rates remain high. According to the World Bank, urban and youth unemployment remain high, exceeding 38% and 50%, respectively. There is high food inflation as a result of shortage of local products and limited importation due to scarcity in foreign currency due to drop of crude oil prices. Slowing growth and rising food prices are expected to result in negative per capita private consumption growth.

⁵⁵ <https://www.bing.com/search?q=United+Nations+Data+Portal+-+Population+Division&cvid>

⁵⁶ <https://iiag.online/locations/ao.html>

iii) **SUSTAINABILITY ASPECTS**

Overall climate change vulnerability mapping will be done to inform the siting of infrastructure and climate change adaptation measures and the AFAP-2 investments.

The Project’s known localized negative impacts on the environment will be minimized through implementation of proposed SECAP procedures and mitigation measures developed for the Project during design and by adherence to environmental regulations.

iv) **TECHNOLOGICAL ASPECTS**

ANGOLA HAS 26% OF THE POPULATION USING INTERNET THROUGH MOSTLY MOBILE NETWORKS. HOWEVER, THERE IS MAJOR CONNECTIVITY DISCREPANCY BETWEEN URBAN AND RURAL AREAS DUE TO INFRASTRUCTURE, MARKET, AND AFFORDABILITY CHALLENGES.

Digital transformation driven by cloud computing provides an environment that will stimulate the promotion of retail payment systems and financial inclusion. The country is gradually moving towards the introduction of e-platforms for various procurement and services. IT sector is taking its pace towards adapting and matching with the changing world.

A summary of the PESTLE analysis is provided in the table 2 below.

Table 2: PESTLE analysis

Governance (political/legal)	<ul style="list-style-type: none"> • Angola is a republic and a multiparty democracy. • There is separation of powers between the Executive, Legislative and Judicial arms of government. • The state has some presence in the economy through State-Owned-Enterprises (SOEs). Public sector enterprises compete with private firms for markets, credit and business activities. • The complaints review mechanism is not independent as it is under the control of the national contracting authority, SNCP. • Angola was ranked 33 out of 100 in the CPI by Transparency international in 2022 and it was position 110 out of 180 countries indicating a medium risk of corruption. • A code of conduct for public officials is defined in the Act. • There is an independent Public Procurement Authority responsible for the regulation, monitoring, oversight and enforcement of public procurement and disposal of assets. • Lack of a system to measure and improve procurement and contract management practices. • There is no formal mechanism for dialogue with civil society organizations. • Civil society organizations do not have significant role in procurement monitoring. • There is no Standard Bidding Document for international competitive bidding and for consultancy services.
Economic	<ul style="list-style-type: none"> • According to AfDB economic outlook on Angola, GDP growth rate was 3.0% in 2022, up from 1.1% in 2021⁵⁷. • GDP growth increased to 3.0% in 2022 thanks to expansion in non-oil sectors and a small rebound in oil production. • High oil revenue further widened the fiscal surplus to 3.0% of GDP in 2022 from 1.9% in 2021. • Overall inflation declined from a peak of 25.8% in 2021 to 21.3% in 2022 due to increased export revenue and agricultural production. • High interest rates that hinder private sector access to capital and hence limits their access to public procurement opportunities • Persistent foreign currency scarcity due to restrictions on currency transfers and payments.

⁵⁷ <https://www.afdb.org/en/countries/southern-africa/angola>

Environmental/ Sustainability	<ul style="list-style-type: none"> Climate change is increasingly affecting Angola’s diversified ecosystems, with droughts impacting the southern parts of the country, as well as floods in some parts of the country. The above risks specially affect the populations that live in vulnerable areas: <ul style="list-style-type: none"> - with drought notably hazarding food security in the southern, while - floods cause significant losses in economic activities, particularly in agriculture and in the transportation of goods. The Angola National Climate Change Strategy (2018–2030), establishes a vision for tackling climate change⁵⁸ However, the consideration of sustainability is not common practice because of the absence of guidelines and procedural guides on sustainability and lack of capacity on the part of contracting authorities to specify sustainability aspects.
Technology	<ul style="list-style-type: none"> Internet penetration of 26% (in 2021). Use of electronic procurement limited to dynamic procurement and it is not used in other methods although the Act provides for its use. Lack of a well-developed network infrastructure for use of mobile devices especially in the rural areas.
Social	<ul style="list-style-type: none"> Two thirds of its population being less than 25 years old, human capital development is a key challenge for Angola, with regards to both education and health. High unemployment at 30%, and the country continues to face challenges in curbing the poverty rate. The latter was estimated at 40.6% in 2019⁵⁹. 41 of 100 Angolans, mostly in rural areas, have a level of consumption below the poverty line (National Institute for Statistics, 2020). High levels of wealth inequality.

Key Conclusions

The medium risk of corruption and lack of transparency is likely to affect competition resulting in low interest of the private sector to project tenders. There is need to create a specific anti-corruption entity with the mandate to investigate complaints related to corruption.

The legal framework should be enhanced to provide a platform for the civil society, citizens and all legal persons interested to participate more efficiently in the fight against corruption in Angola.

There is need to create formal structures in the legal and regulatory framework to facilitate dialogue and engagement between the private sector and the public sector to provide a better understanding of the concerns of the private sector regarding the public procurement market including receiving feedback on how the public procurement operations can be improved.

The devaluation of the Kwanza and forex shortages and the exchange rate instability have negatively impacted the importation of construction equipment and materials and other project inputs.

Inflation is likely to increase from current levels in 2023 due to the weakening of the currency and the recent removal of subsidies. Increasing input costs may occasion budget deficits during implementation. This will be mitigated by updating the cost estimate of the relevant packages. This may be mitigated by providing the flexibility on payment currency and by including price escalation clauses in the contract as appropriate.

⁵⁸ <https://www.ucm.minfin.gov.ao/cs/groups/public/documents/document/aw4z/nty0/~edisp/minfin3564877.pdf>

⁵⁹ <https://www.afdb.org/en/countries/southern-africa/angola/angola-economic-outlook>

The lack of a system wide e-procurement makes it difficult to address linkages between procurement planning, allocation of budget and availability of funds to ensure timely payment.

b) IA Capability Assessment

An assessment of the capacity and resources of the implementing agency was carried out to assess the weaknesses, strengths, opportunities and threats that could face the IA in executing the entire portfolio of project procurement but especially in executing big-ticket contracts.

A summary of the strengths, weaknesses, opportunities, and threats regarding the capacity of the IA are presented in Table 3 below.

Table 3: SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • There is a procurement manual that stipulates the operational procedures to be followed by procurement entities. • Contracts made and entered into by virtue of rules of international organizations are excluded from the scope of the national procurement law. • The IA has adequate facilities, such as computers, internet connection, photocopy facilities, printers, etc. 	<ul style="list-style-type: none"> • The implementing agency (IA) has limited experience in procuring and implementing projects funded by IFAD. • There is no integration between the procurement planning and the budgeting system to provide information of all major contracts • Weaknesses in contract management and administrative systems; • Absence of a procurement strategy hence poor procurement risk management. • Level of procurement skills is low and is not consistent with the required skills mix for their procurement responsibilities.
Opportunities	Threats
<ul style="list-style-type: none"> • Opportunity of using capacity support provided by IFAD's on the-job procurement and refresher clinics. • The IA/PMU procurement staff can enhance their skills through the IFAD BUILDPROC certification programme. • Opportunity to use IFAD's end-to-end OPEN system and CMT to improve efficiency of procurement and contracting processes. • Opportunity to implement IFAD-funded procurement in accordance with the terms of the financing agreement. 	<ul style="list-style-type: none"> • a relatively unstable currency due to foreign currency scarcity and exchange rate instability; • IA staff do not have adequate experience on procurement of complex works contracts; • Increasing input costs may occasion budget deficits during implementation. • Vagaries of weather may affect speed of project implementation. • Significant gaps in the legal framework that may provide an avenue that can be used to introduce practices that go against good public procurement hence affecting quality, efficiency, effectiveness and equity of procurement outcomes.

Experience

The implementing agency (IA) has limited experience in procuring and implementing projects funded by IFAD and other donors. The staff lack the necessary skills and experience to undertake all categories of procurement. Procurement for the first phase of AFAP was implemented by a Single Coordination Unit (SCU) which was managing all IFAD projects. The SCU did not directly involve IPA in procurement. The IA is therefore not sufficiently familiar with IFAD project procurement guidelines and procedures.

The IA has adequate facilities, such as computers, internet connection, photocopy facilities, printers, etc., although the equipment is too old to adequately undertake the planned procurement.

Hands on support

The IA does not have adequate procurement capacity. A Procurement Specialist and a Procurement Assistant will be competitively recruited to manage the envisaged procurement for the project. During the assessment of the IA capacity, it was noted that the IA staff lack experience in implementation of SECAP procedures. Hands on support will not be required but during the start-up mission, IFAD will provide support in guiding the procurement staff on how to integrate SECAP procedures in the technical specifications and bidding documents and in strategic procurement planning.

A comprehensive capacity building programme will be put in place to train the IA and the PMU staff on procurement planning, preparation of bidding documents, evaluation and contract award, contract management and administration, IFAD's Procurement Guidelines, the use of the IFAD OPEN end-to-end project procurement system and the application of SECAP procedures. This is elaborated in detail in the section on Capacity Building for Implementing Agency in page 27 of this document.

IFAD will review procurement documents and provide timely feedback to the PMU.

Contract Management Capability and Capacity

Contract monitoring is generally weak as the staff lack contract management skills especially for management of complex high value contracts, often leading to poor performance of most contracts. The IA will be supported by a competitively recruited procurement specialist in overall project/contract management including putting in place contract management plans. IFAD will provide support to the PMU staff at project both at project start up and through periodic capacity building clinics to enhance contract management capacity.

Complaints management and dispute resolution systems

The complaints review mechanism is not independent as it is under the control of the national contracting authority, SNCP. Lack of effective handling of complaints and appeals during the tendering and contracting process may lead to a lack of trust in the system by bidders. There is need for clear segregation of duties among the officials in charge of issuing procurement no objections to award of contracts and those reviewing complaints.

c) Market Analysis

Market analysis was conducted on the construction Industry in Angola and the supply markets for the category of goods and services anticipated for the AFAP-2 Project.

The sources of information included Internet search on construction industry, public information, bid evaluation reports, contract award registers and project team experience.

Among the objectives of market analysis is to understand the nature and level of competition within the market; to develop an appropriate understanding of the capacity of the targeted market sectors to bid for the goods, services, and/or works required by the project; identify risks associated with a market and describe how the risk should be managed; to identify the

capability of the suppliers, contractor and service providers to meet the project’s development objectives for varying package sizes and procurement methods, etc.

The following are the findings:

Construction Works

Majority of the building activity in Angola is undertaken by either local firms in association with international contractors, from Portugal (such as Soares da Costa, Teixeira Duarte, and Mota-Engil) and Brazil (Odebrecht group) in particular or Chinese firms. The anticipated construction works for IFAP II will not be complex although they include a few works of high value (construction of 200kms of last mile road and construction of community-group fish ponds). There are several national firms that have adequate capacity to participate in the expected works packages for AFAP-2, especially on the construction and rehabilitation of office building, construction of water supply canals, and construction of fish cages. The high value works can be undertaken either by foreign contractors or by consortia of local and foreign contractors.

ICT Equipment

There are several computer dealers and distributors in Angola. Most of the IT equipment is imported from EU countries, and China, Japan and UK. The suppliers are able to supply the projects’ IT requirements.

Furniture

The supply of furniture is well-established and there are several suppliers of office furniture products.

Vehicles/Motorcycles

The new vehicle market in Angola is sufficient considering the size of the market. There are a number of dealerships in Angola that sell international brands and different sizes of vehicles from sedans, pick up vehicles and buses. New vehicles are imported from the EU, Japan, China and South Korea.

Consulting services

The level of competition in the consulting services Angolan market is high, as there are many consulting firms operating in the country. There are several local consulting firms that offer a wide range of consulting services across various sectors and industries in addition to several multinational consulting companies including strategy and management consulting firms such as McKinsey Angola, Deloitte, Ernest and Young, PWC, and PKF; BCG Angola; and infrastructure engineering supervision such as Zuttari and ENGConsult Angola and environmental advisory firms such as Holisticos Consultoria Ambiental, Angola Resources Consultants, and SGS Angola.

The global professional services firms have a long history and reputation of providing high-quality consulting services to clients across the world, and they have extensive networks and resources to support their operations in Angola. They also have access to best practices and methodologies from their global offices and partners. On the other hand, the local consulting firms have more knowledge and understanding of the local culture, context, and challenges, as well as more connections and relationships with the local stakeholders. They may also have

more flexibility and adaptability to meet the specific needs and expectations of their clients. However, they may lack the scale and scope of the global firms, and they may face difficulties in attracting and retaining talent and accessing capital.

The project does not involve a large number of consulting services to support the project implementation. For most part, the risk for selection of consulting services is low, since there is a robust supply market for the services required. In addition, the IA has already procured several consultancy services in the first phase of AFAP.

d) Market Sector dynamics

According to a report by FAO, the Angolan government has been working with FAO to develop the aquaculture sector in the country. The government has identified aquaculture as a priority sector for development, and has provided funding for projects aimed at developing quality aqua feed and applying good practices in aqua feed production, management, and feed quality monitoring⁶⁰. Certain cases of larger cooperatives and producers have developed their own feed production solutions to respond immediately to import limitations.

Both materials and construction sector expertise are in short supply. With very little in the way of domestic materials production, construction companies in Angola currently have to import most of their own materials and equipment⁶¹. The most important players operating in the Angolan public works market are foreign companies, mostly from Portugal, Brazil and China.

For vehicles, and ICT hardware & software, there is no domestic manufacturing capacity or facility to produce these goods and equipment. The bidders import the goods and equipment and provide the after sales support.

The country has a large market of qualified and experienced local consultancy firms in all sectors, and association between local and foreign firms is a common feature in situations where firms come together to enhance their capacity.

Mobile service providers are forging partnerships with a range of consumer-facing players such as banks, fuel service providers and logistics services providers to facilitate online payments.

e) Financial

Business risk in Angola is generally high. The Kwanza is relatively unstable currency due to foreign currency scarcity and exchange rate instability resulting from both declining oil revenue and production in the first half of 2023⁶². This impacts the importation of essential commodities and inputs. Limited access to and high cost of credit affects the development of domestic contractors with interest rate of 18% as at November 2023⁶³.

The major inputs for delivery of the planned construction contract are construction material, equipment, and labour. The cost of these inputs is relatively unstable. Although contractors' pricing strategy may vary, because the contracts are awarded with different currencies (based

⁶⁰ www.fao.org/africa/news/detail-news/en/c/413268/

⁶¹ <https://osisa.org/wp-content/uploads>

⁶² www.imf.org/-/Media/Files/Publications/CR/220223/English/11AGOE2023003.ashx

⁶³ www.bna.ao

on the preference/origin of bidders) and because contracts of longer duration are subject to price adjustment provisions, pricing strategy would be expected to be competitive. However, contractors will be impacted by high rate of inflation.

e) Procurement Trends

Projects in Angola that procure similar contracts (such as SREP and SAMAP) use competitive approaches in selecting suppliers and negotiating contracts depending on the nature, scope and objectives of the project. Each project use contract terms that are specific to each project or context.

The IA engages the market by publishing tender announcements for the projects in the UNDB and web sites of IFAD and in Jornal de Angola newspaper which has wide circulation in Angola. The current trend is for companies to partner.

The construction market is dominated by a few national large civil engineering contractors while in the area of consultancy services, few local firms are able to compete with the international players. In general, access of the local industry to public procurement opportunities is hampered by difficulty to access to credit because of high interest, lack of understanding of bidding procedures and stiff competition from international firms that have much more technical and financial muscle. In order to be more competitive, local firms enter into partnership with international firms through joint venture and sub-contracting.

The issues found to contribute to value for money in project procurement include identifying and establishing clear specifications/terms of reference, improved procurement planning, improved processes such as bidding, appropriate use of evaluation criteria that incorporates both quantitative and qualitative factors, effective contract management, prompt resolution of complaints and clear identification of risks and managing the risks through better design of the procurement arrangements.

Issues that have been found to inhibit value for money include delay initiation of planned project activities, prolonged approval processes, late resolution of complaints, late payments against contract milestones.

An important lesson is that time is an important element of value for money as timely delivery of project requirements can contribute to value for money. On the other hand, delays jeopardize value for money.

Supply Positioning Model

The details of supply position of items to be sourced under the project is reflected in the supply positioning matrix in Figure 1 below.

Consulting services for detailed value chain and market assessment studies, studies on institutional capacity gap assessment and production of a capacity development plan are categorized as “Strategic Critical”. Strategies to be considered for this category include robust risk analysis and management, ensuring security of service at a good price, and reducing the total cost of ownership of project assets.

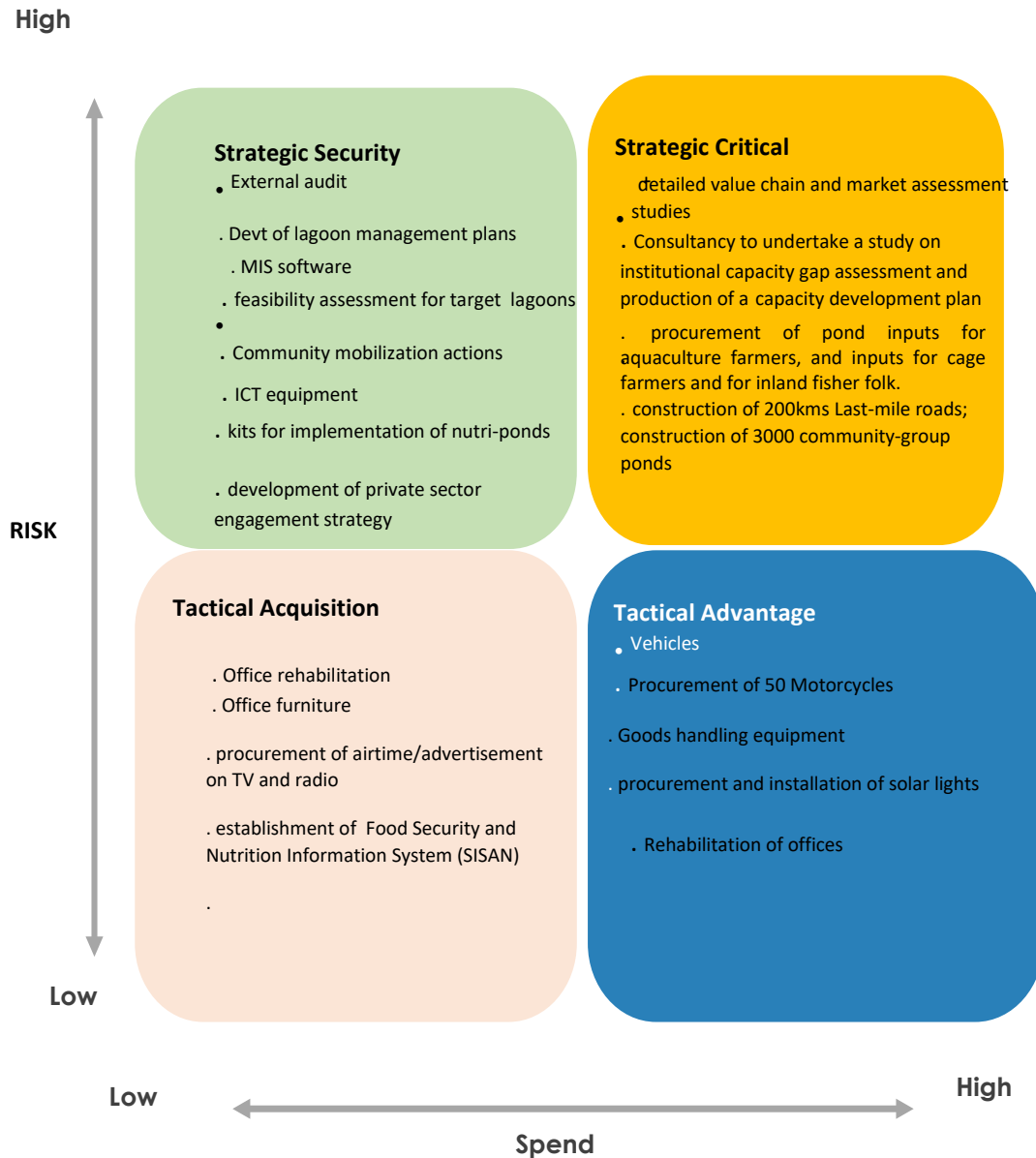
Office rehabilitation works and office furniture are categorized as “Tactical Acquisition” because they are low value and low risk. Strategies that emphasize efficiency in sourcing

and achieving low costs based on the value and nature of contracts are suitable for this category.

Procurement of consulting services to carry out feasibility assessment for target lagoons and development of lagoon management plans, consultancy to conduct a baseline survey of nutrition core indicators in the project intervention area, internal and external audit services, consultancy to support the implementation of targeting and community mobilization actions and procurement of MIS software are quite critical to achieve the outcome of the project and are categorized as “Strategic Security”. Procurement strategies focusing on quality and risk reduction should be used and ensure security of supply for items in this category.

Procurement of vehicles and procurement of motorcycles for extension services are categorized as “Tactical Advantage” due to relatively low risk but relatively high value of these packages. Strategies that are suitable for this category are those that focus on cost reduction, taking advantage of market forces to obtain competitive prices, and developing in-depth market knowledge.

Figure 1: Supply Positioning Matrix



Types of competition in the market and “Porter’s Five Forces” tool

The extent of competition in the market was analysed using the Porter’s Five Forces tool and the finding are presented in table 4 below.

Table 4: Porter’s Five Forces

Competitive rivalry	Given there are several suppliers for most categories of goods, works and services, competitive rivalry is likely to be high. Suppliers in the sector are likely to bid against each other regularly. The number of local suppliers is reasonable to ensure acceptable level of competition.
Bargaining power of buyers	Bargaining power of AFAP-2 is high as many bidders may be interested in getting contracts and continued business with the Project as some of its packages are high value in total and they will be assured of timely payment.

Bargaining power of suppliers	Bargaining power of suppliers is low due to a fairly high degree of competition. There is quite low procurement risk identified in this regard.
Risk of new entrants	There are high barriers to entry for new firms especially for high value items such as fish feed and vehicles, due to high costs of capital, infrastructure and transport which contribute to the cost of sourcing goods, materials, equipment as well as freight costs. There may also be a high barrier to entry by consultants due to the specialized skills and length of experience that is required. Entry may be easier for some of the products which do not require high capital outlays such as furniture, IT equipment and office supplies.
Risk of substitutes	There is low risk of substitution for all the categories.

Supplier Preferencing Tool

Table 5: Supply preferencing matrix

High			
Attractiveness of account	Development	Core	
	<ul style="list-style-type: none"> • Motor cycles for extension officers • Goods handling equipment 	<ul style="list-style-type: none"> • feasibility assessment for target lagoons and development of lagoon management plans • detailed value chain and market assessment studies • MIS software 	
	Nuisance	Exploitable	
	<ul style="list-style-type: none"> • Office furniture • Office rehabilitation 	<ul style="list-style-type: none"> • Vehicles • Furniture • ICT equipment 	
Low	Relative value of account		High

Procurement of vehicles and motorcycles, procurement of motor vehicles, and procurement of consultancy services to carry out detailed value chain and market assessment are likely to represent a larger proportion of supplier’s/contractor’s revenue and would likely motivate contractors to bid for the goods, services and construction contracts. The Project should ensure adequate transparency in the bidding process. For works packages, the project should ensure that site availability, construction drawings and measurements are provided on a timely manner. Payments should be processed on time.

The Project envisages high volume of small value items like furniture, ICT equipment and procurement of goods handling equipment. The market for these items is fairly developed in the country. These items should be collated to increase the value and make the packages attractive to motivate many of the big local suppliers to participate and ensure value for money.

Key conclusions of Market Analysis

For those items that are likely to represent a larger proportion of contractor’s revenue like procurement of vehicles and motorcycles, and procurement of consultancy services to carry out detailed value chain and market assessment, it is likely that suppliers and consultants will be motivated to participate in the procurement opportunities. The Project should ensure transparent bidding process through maintaining procurement best practices such as drafting clear requirements/ specifications, standardized evaluation criteria, maintaining open communication, ensuing equal access to information and equal treatment, facilitating debriefs and protests to enhance fairness. For works packages such as office rehabilitations, the project should ensure that site availability, all relevant designs/construction drawings and measurements are provided on a timely manner. Payments should be processed on time.

The market assessments demonstrate that enough domestic suppliers, contractors and service providers who are capable of providing the goods, works and services anticipated for the project.

However, the assessment showed that majority of the suppliers were not knowledgeable on the IFAD procurement procedures and especially SECAP procedures. There is need for the IA and the IFAD-funded projects in Angola to do sustained sensitization of the private sector regarding how to access and successfully participate in procurement opportunities funded under the projects.

III) Procurement Risk Analysis for abovementioned contract/group of similar contracts

The Project Procurement Risk Assessment identified the following risks which are summarized in the matrix below together with their mitigation actions with implications for the procurement strategies:

Table 6: Risk Register

Risk Description	Proposed Mitigation	Risk Owner
Limited knowledge and experience of the IA staff with IFAD Procurement Regulations that may cause the project implementation delays and non-compliances.	Provide procurement training for AI and PMU staff, including initial training during project preparation and regular procurement clinics during project implementation by IFAD. Recruit a procurement specialist to assist the PMU in carrying out procurement activities.	IA
Limited knowledge on SECAP standards leads to non-inclusion of social, environmental and climatic requirements in the bidding and contract documents.	IFAD to offer orientation programme and regular clinics for IA and PMU procurement personnel.	IA
Governance risks associated with conflict of interest, fraud and corruption, which may adversely affect the efficiency and effectiveness of the project implementation.	Require staff involved in procurement to declare their interest and sign declaration of impartiality and confidentiality forms. Enhanced disclosure of procurement information, including publication of the	IA/PMU

	annual procurement plan and a quarterly summary of the contract award information for all procurement packages on project website and in the SNCP's website.	
Lengthy internal procurement reviewing process that may cause the project implementation delays.	Adopt the PIM prepared at Project Design which include inter alia a procurement comprising of clear rules, step by step procedures and responsibilities, timeline requirements for procurement activities, actions and decisions. Use it in tandem with the IFAD Procurement Handbook.	
Unrealistic procurement Planning	Assign suitably qualified and experienced technical and procurement staff to participate in AWPB and PP preparation. Finalize and monitor timely implementation of procurement Plan and to ensure that the plan is reviewed and updated periodically.	IA/PMU
Weak contract administration and management	IA and project procurement staff to enroll for Contract Management courses offered through BUILDPROC and other institutions to enhance their capacities in managing procurement contracts through training.	IA/PMU
Delayed payments due to long times taken to provide sufficient counterpart funding to settle tax obligations may pose potential risks to the project implementation	IA to closely follow up with Ministry of Finance to ensure availability of counterpart funding for settlement of tax liabilities for all signed contracts.	IA
Shortage of foreign exchange due to restrictions and bureaucracy on foreign currency transfers and payments may delay project execution.	In cases of exceptionally prolonged delays, request for direct payments from IFAD.	IA

Options Analysis

The procurement strategy options were assessed using three criteria, Feasibility for implementation, Suitability to support the project objectives, and Acceptability by the implementing agency using a rating scale of 1 to 10.

Table 7: Strategic options

Strategic Options Description		Feasibility (1-10)	Suitability (1-10)	Acceptability (1-10)	Overall (3-30)	Comment
Procurement Strategy Options	Rationale					

Construction works (Group ponds, construction and installation of cages, rehabilitation of offices, construction of last-mile roads)						
One package with open competitive bidding	Accommodates national and international suppliers. Consolidates packages.	9	8	9	26	Acceptable to AI
SECAP performance standards	Include SECAP procedures in specifications, bidders qualifications, evaluation criteria and contract clauses	8	8	8	24	Acceptable to AI
Weighted and scored evaluation criteria in place of pass/fail.	Local firms to enter into association with foreign firms to enhance their capacity through joint ventures. Enables a value-for-money comparison of bids. Helps to address abnormally low bids by enabling quality to be rated.	8	8	8	24	Acceptable to AI
Contract management	Essential to monitor quality through contract implementation.	9	9	9	27	Acceptable to AI
Bidding Procedure Single-Stage: One-Envelope (1S1E).	Familiar to PMU, easy for evaluation and time saving	9	9	9	27	Acceptable to IA

Vehicles, Motorcycles, and ICT equipment packages

Strategic Options Description		Feasibility (1-10)	Suitability (1-10)	Acceptability (1-10)	Overall (3-30)	Comment
Procurement Strategy Options	Rationale					
One package with multiple lots and Open competitive bidding	Accommodates national and international suppliers.	9	9	9	27	Acceptable to IA

Use of conformance-based specifications	Ensure simple and faster evaluation	9	9	9	27	Acceptable to IA
SECAP performance standards	Include SECAP procedures in specifications, bidders qualifications, evaluation criteria and contract clauses	9	9	9	27	Acceptable to IA
Bidding Procedure Single-Stage: One-Envelope (1S1E)	Familiar to PMU, easy for evaluation and time saving	9	9	9	27	Acceptable to IA
Furniture and other goods packages						
Open competitive bidding/ Shopping	Given value of package and risk, conduct open competitive bidding and award to lowest cost bid that conforms to specification. Alternatively, could specify requirements in RFQ document	9	9	9	27	Acceptable to IA
Separate packages (including lots in case of office equipment)	Similarity of the items in the package and manufacturer's product range considered	9	9	9	27	Acceptable to IA
Discounts for multiple lots	Leverages scale and volume discounts	8	8	8	24	Acceptable to IA
Consulting Packages						
QCBS, QBS, QCS, LCS, ICS as appropriate for each package	Match method to levels of risk, value and complexity	9	9	9	27	Acceptable to IA

IV) Procurement Objective for abovementioned contract/group of similar contracts

The procurement objectives of the project are to:

- a) carry out procurement in accordance with the approved procurement plan and in compliance with the national Procurement Regulations and IFAD Procurement Guidelines.
- b) package procurement activities to facilitate the use of the most competitive and efficient procurement method/s;
- c) conclude the procurement process of all packages in timely manner.
- d) Effectively manage contracts to ensure all contract’s outputs are delivered on time and with quality acceptable to the Project to achieve value for money.

V) Recommended Procurement Approach for the Project Procurement Approach

Procurement strategies selected by the project team, are shown in the tables below.

Procurement Strategy Selection for Works Packages

The following options will be used:

Table 8: Procurement strategies for works

Procurement Strategy Option	Refurbishment & Partitioning of offices (minor works)	Farmer service centres
Separate design and construction packages		x
Selection Method: Request for bids	x	x
Subcontractors’ evaluation		x
Clauses required to be included in subcontracts		x
Experience qualification allows similar related works	x	x
Contract management including inspection of equipment	x	x

Procurement Strategy Selection for goods, consulting and non-consulting services Packages

Table 9: Procurement strategies for Goods, Consulting and Non-Consulting Services

Requirement	Procurement Strategy
	Specify minimum requirements.
	Use conformance-based specifications

Smart Kiosks, Solar equipment, Vehicles, Motorcycles, and ICT equipment packages	Open competitive bid with lowest evaluated substantially responsive bid
	Bidding Procedure Single-Stage: One-Envelope (1S1E)
Furniture, Surveillance equipment and other goods packages	Use conformance-based specifications
	One package (with multiple lots where applicable) and specify minimum requirements for the package/lots.
	RFQ document with lowest evaluated substantially responsive bid.
Consulting services	QCBS, CQS, LCS, ICS as appropriate for each package

Procurement Methods

The procurement method to be used for all goods, works and non-consulting packages is Open Competitive Bidding (OCB) and advertisement will be either local or International depending on the value and corresponding threshold. In all cases supply markets exist with enough suppliers who would be sufficiently attracted to the packages. For lower risk goods and non-consulting services packages, Request for Quotation method can be used.

Three big ticket contracts were identified. One goods contract for the procurement of inputs for aquaculture farmers for USD6,165,000.00 and two works contracts for construction 200kms of last-mile roads (USD1,103,000.00) and construction of community group ponds (USD6,618,000.00). These would be procured using the ICB method.

There are other three works contracts for the entire period covered by the PP. One is for the construction and installation of fish cages for USD303,000 and this will be procured using the NCB method. The other two are for the rehabilitation of office at a cost of US\$100,000.00 and the last one is for the construction of water supply canal systems for USD110,000.00. The latter two contracts will be carried out using National Shopping procedures.

Other goods and goods-related non consulting services packages, where Request for Bids will be advertised using ICB procedures and these include contracts for the procurement of double cabin vehicles for US\$315,000; procurement of 50 motorcycles for US\$153,000; for the procurement of ICT equipment for US\$191,000; the procurement of solar lights and automatic feeder cages for USD221,000.00.

Apart from the above contracts, the other goods and goods-related non-consulting services packages of the Project are of relatively small value and the local market is considered able to respond to the demand using National Shopping procedures.

For the selection of consulting services, the Quality and Cost Based Selection (QCBS) method will be used to procure the consultancy contract to carry out detailed value chain and market assessment for US\$81,000 and consultancy for the development of lagoon management plan US\$63,000.00.

The CQS method will be used for recruiting consultants for: (i) providing technical assistance to anchor producers for US\$50,000.00; (ii) undertaking a study on institutional capacity gap assessment and production of a capacity development plan for US\$30,000.00; and (iii)

carrying out fisheries study for characterization of the main production basins for aquaculture and small-scale inland fisheries for US\$25,000.00.

External Audit services are estimated to cost US\$40,000.00 and will be procured using the LCS method.

The Project will have other several specialized activities that will not require a team and will be processed through the Individual Consultant Selection (ICS) method.

The procurement of operating activities including seminars, workshops, meetings, communications, vehicle operation costs and travel shall be carried out using Government of the Angola procedures.

Prequalification

Prequalification will not be used for any of the goods and works packages.

Bidding Procedures

All Goods, works and non-consulting services packages will use Single-Stage, One-Envelope (1S1E) bidding procedure while the bidding procedure for consulting packages will be 2S2E, except for the selection of individual consultants and the external auditor.

Standard Bidding Documents and Contract Forms

All packages may use the Government of Angola standard bidding documents except for ICB which will use the IFAD bidding template and forms. The National SBD's should be adjusted to include the IFAD mandatory policies and SECAP requirements.

Contract Management Approach

The construction works contracts will follow technical specifications provided by designs, including the measures for mitigation of environmental, social and climate risks contained in the ESIA's. The construction process will adjust and align with any unforeseen situation, after discussion with the design engineers. It will be necessary to engage a project manager especially for the high value contracts. An officer from the Buildings' department of the Ministry of Works with the required expertise shall be assigned to monitor and manage the Works packages to ensure the risk to quality through nonperformance is mitigated.

The acceptance test for goods shall involve visual inspection to ensure that delivery includes the correct number of the correct items. The goods must meet the agreed quality specified in the contract.

Acceptable delivery of services includes the completion of events, milestones or deliverables specified in the scope and tasks to be undertaken, as set out in the contract.

The specific functions, features and mandatory standards specified in the contract must be met for acceptable delivery of works.

All goods, works and services contracts will be monitored to ensure that contract deliverables are fully received and that there are no outstanding claims for missing or damaged items against the supplier or service provider.

Payment obligations shall only come into effect upon the acceptance of the goods or certain or all deliverables for the services and works.

Procurement Approach for big ticket contracts

Table 10: Big ticket works contracts - construction 200kms of last-mile roads (USD1,103,000.00) and construction of community group ponds (USD6,618,000.00).

Attribute	Selected arrangement	Justification Summary/Logic
Specifications (SECAP compliance)	Performance	Will allow contractors to suggest creative solutions. Ensure simple and faster evaluation.
Sustainability Requirements	Yes	To address SECAP requirements; allow contractors to innovate;
Contract Type	Design and Build	Identifies, defines risks and responsibility allocation.
Pricing and costing mechanism	Cost plus	Provide flexibility to build the project for a stipulated sum or on a cost-plus-fee basis, possibly with a guaranteed maximum price.
Supplier Relationship	Collaborative	Facilitates open communication and transparency; allows Client to share their vision with the team, and align the interests of the stakeholders; ensure quality and consistency during contract implementation.
Price Adjustments	None, fixed price.	The guaranteed maximum price sets the ceiling for the construction project price.
Form of Contract (Terms and Conditions)	Special conditions of contract: Contract documents; contract price; Design-Builder's fee; Cost of the work; correcting defective work; office personnel; contingency; non-reimbursable cost; anticorruption and other prohibited practices; Warranty; Liquidated damages; legal costs; defending patent infringement claims, dispute resolution; savings.	Stipulates and allocates risks and obligations clear manner to ensure they are well understood, and that contractual provisions for resolving any issues that may arise are well settled understood.
Selection Method	Requests for Bids (RFB)	Most relevant and applicable method.
Selection Arrangement	Commercial Practices	Promote efficiency and value for money.
Market Approach	Type of Competition: Open Number of Envelopes/Stages: Single Envelope Negotiations: Yes	Encourages many contractors to participate including foreign firms.
Pre / Post Qualification	Post-Qualification	Facilitates quick issuance of tenders; avoid delay in the initial issue of tenders.
Consultant Selection & Evaluation Method	Quality Cost Based Selection (QCBS) – for the design consultant	Provides for evaluation of both quality and price
Evaluation of Costs	Life Cycle Costs	Enables assessment of total cost of facility ownership
Domestic Preference	Yes	This is allowed up to 7.5%.

Rated Criteria	Criteria to be used (mandatory/desired): Relevant experience of similar works; Key experience requirements; average annual construction turnover; knowledge of local customs and administrative systems.	Represent the key areas of importance and emphasis to be considered in the selection decision; and establishes a clear evaluation and selection process; ensures the process is fair, open and transparent.
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Table 11: Procurement approach for big ticket good contract (procurement of Inputs USD 6,650,000.00)

Attribute	Selected arrangement	Justification Summary/Logic
Specifications (SECAP compliance)	Performance	Will allow suppliers to suggest innovative solutions. Ensure simple and faster evaluation.
Sustainability Requirements	Yes	To address SECAP requirements.
Contract Type	Traditional	Clarity about precise requirements and how much it is likely to cost.
Pricing and costing mechanism	Lump sum	Contract scope and schedule can be well defined.
Supplier Relationship	Collaborative	Facilitates close interactions and open communication to ensure quality and consistency during contract implementation.
Price Adjustments	None, fixed	Cost estimation with accuracy.
Form of Contract (Terms and Conditions)	Special conditions of contract: Contract documents; contract price; payment; correcting defective work; anticorruption and other prohibited practices; Performance security, Insurance; Liquidated damages; dispute resolution; use of sub-contractors.	Stipulates and allocates risks and obligations clear manner to ensure they are well understood, and that contractual provisions for resolving any issues that may arise are well settled understood.
Selection Method	Requests for Bids (RFB)	Most relevant and applicable method.
Selection Arrangement	Commercial Practices	Promote efficiency and value for money.
Market Approach	A. Type of Competition 1. Open B. Number of Envelopes/Stages 1. Single Envelope c. Negotiations (Yes)	Encourages many contractors to participate including foreign firms. Negotiate non price aspects, for example on how to achieve added value such as reduced lead times and KPI's.
Pre / Post Qualification	Post-Qualification	Facilitates quick issuance of tenders; avoid delay in the initial issue of tenders.
Consultant Selection & Evaluation Method	N/A	N/A
Evaluation of Costs	Adjusted Bid Price (corrected for a bidder's minor deviations)	To correct any errors in bids.

Domestic Preference	Yes	This is allowed up to 15%.
Rated Criteria	Criteria to be used (mandatory/desired): Adherence to specifications; Bidder's qualifications and capacity and history of previous work of a similar nature; timeliness/delivery.	establishes a clear evaluation and selection process; ensures the process is fair, open and transparent.

Procurement Plan

Based on the PPS, a procurement plan for the project has been developed with total of 44 packages including 11 goods, 1 works package and 32 consulting services packages. The detailed procurement plan is available as a separate project document, which will be updated annually or as needed to reflect the current status of the implementation of each package or to add new packages as needed.

Supervision Plan

In addition to prior review supervision, IFAD will undertake twice yearly supervision and implementation support missions to review project implementation status and provide technical support and quality assurance of the assessment. The supervision missions will:

- (i) verify the procurement planning progress and the bid management and implementation of the procurement activities;
- (ii) verify that the procurement and contracting procedures and processes followed for the projects were in accordance with the Financing Agreement and the Procurement Arrangements Letter;
- (iii) verify technical compliance, physical completion and price competitiveness of each contract in the selected representative sample;
- (iv) review and comment on contract administration and management issues as dealt with by the PMU; review capacity of the PMU in handling procurement; and
- (v) identify improvements in the procurement process in the light of any identified deficiencies.

IFAD will also closely monitor the project through reports and a project mid-term review.

Annual financial audits will be conducted and financed by the Fund. A project completion report will be prepared to evaluate progress against outputs and outcomes and draw lessons for possible follow-up operation.

Capacity Building for Implementing Agency

The staff of the Implementing Agency (IA) and the PMU staff will need induction training on applicable national rules and regulations, and IFAD procurement guidelines and procedures in order to:

- i) get acquainted with the procurement guidelines, procedures and processes.
- ii) get a clear understanding of the role that procurement will play in prior to project start up and during project implementation; and
- iii) ensure close coordination of effort of all participants.

There will be a further need for an extensive training programme for IA and PMU staff to build and strengthen the PMU Capacity to address the following areas identified during the assessment of implementing agency capacity needs:

- i) IFAD Procurement guidelines and Handbook (including the Procurement Arrangements Letter);
- ii) Use of the OPEN system;
- iii) Procurement planning including development of the Procurement Planning Strategy, contract packaging, selection of procurement methods, thresholds and prior review (including prior review documentation);
- iv) Bidding process and contract award procedures;
- v) Contract management and use of the contract monitoring tool;
- vi) SECAP performance standards; and
- vii) Record keeping and information management

VI) Responsibility Matrix for development of the PPS (Stage I of the project’s design phase)

Table 12: Matrix for the preparation of the procurement part of IFAD’s PDR

SPO	IFAD Proc. Specialist/ consultant	CD or CPM	OPR	National Stakeholders	ESS Specialist/s	IA of Beneficiary Government
A	R	C	C	C and I	C	C and I

Where: **A** stands for oversight / approval and accountability for finalization of the PDR for DRM submission

R stands for responsibility to conduct the task

C stands for the need to consult with this party

I stands for the party being informed about the conduct and result of the project’s procurement design tasks.

VII) Lessons Learned and challenges from previous projects implemented.

Procurement action should be started as early as possible in order to avoid delays in the implementation of the procurement plan and project execution. It is crucial to ensure transparency in the bidding process in order to attract adequate number of bidders. Information should be provided to bidders during bid preparation stage to increase bidders’ confidence in fair treatment and timely decision-making process, increasing the attractiveness of participating in the Bid. Site availability and construction drawings should be provided in a timely manner. Measurements and payments should be timely.

Annex 7: SECAP Risks and Procurement Actions

SECAP Assessment Risks relevant to Procurement

The SECAP assessment flagged some risks that the mission considered relevant for procurement, those risks are addressed in the bidding documents (e.g. choice of bidding document, requirements for bidder qualifications, technical specifications, specific contract

conditions etc. The SECAP risks relevant to procurement are highlighted under the following categories:

- SECAP Standard 1: Biodiversity conservation
- SECAP Standard 2: Resource efficiency and pollution prevention
- SECAP Standard 3: Cultural heritage
- SECAP Standard 5: Labour and working conditions
- SECAP Standard 6: Community health and safety
- SECAP Standard 7: Physical resettlement

The detailed risks are listed in Table 12 along with the proposed mitigation measures to be considered during project procurement implementation.

Table 12: SECAP Risks and Mitigation Measures

Environmental and Social Safeguards				
Biodiversity conservation	Risk Rating	Consequence	Guidances for SPOs	Mitigation Measures
1.1 Could the project potentially involve or lead to conversion or degradation of biodiversity, habitats (including modified habitat, natural habitat and critical natural habitat) and/or ecosystems and ecosystem services?	Moderate	Moderate Project will significantly affect modified habitat but will not impinge on natural habitat or critical natural habitat.	The project activities such as pond and market construction as well and the roads rehabilitation will result in land use change and have an impact on the ecosystems and the services being provided. Include in the bidding documents guidance for contractors to avoid ecologically sensitive areas in the construction of ponds, markets and roads as well as location of cages. Any infrastructure sites would require restoration of the surrounding areas.	<p>Specifications: will prescribe avoiding ecologically sensitive areas in the construction of ponds, markets and roads as well as location of cages.</p> <p>Bidder qualifications: Previous work experience of the Contractor in similar environments will be required.</p> <p>Bidding documents: Bidding documents will prescribe compliance with national environmental laws supplemented by SECAP Standard 1 requirements as relevant.</p> <p>Contract: Use of IFAD non-FIDIC contract document for ICB contracts under USD 5 million OR borrower's National contract Documents (supplemented by SECAP standards) as per prescribed thresholds in the PAL.</p>
1.8 Could the project involve or lead to procurement through primary suppliers of natural resource materials?	Moderate	Moderate Project requires procurement of natural resources through primary suppliers, and resource extraction is tightly regulated	The project includes sourcing of fingerlings and fish feed and construction of markets that may use wood scaffolding. Specify in the bidding documents the need for sustainable sourcing of inputs that will be supplied.	<p>Technical specification: Specify feeds obtained from certified feed manufacturers to ensure that feeds have all the desired qualities.</p> <p>Feasibility of prescribing legally sourced timber for construction and scaffolding (certified to be from sustainable forests).</p> <p>The technical specifications of the bidding documents for construction materials will consider alternatives to purchasing natural resources from primary suppliers.</p> <p>Bidder qualifications: Previous work experience in similar environments</p> <p>Bidding documents: To consider sustainably sourced materials as "minimum specification".</p> <p>Contract:</p>

				Use of IFAD/ International Federation of Consulting Engineers (FIDIC) version of contract for international competitive bidding (ICB) contracts above US\$5 million. Use of IFAD non-FIDIC bidding document for ICB contracts under US\$5 million
Resource Efficiency and Pollution Prevention	Risk Rating	Consequence	Guidances for SPOs	Mitigation Measures
2.1 Could the project involve or lead to the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	Moderate	Minor Pollutants may possibly be released, either routinely or by accident, but treatment systems are proven and verified. Receiving environment has absorptive capacity.	Potential generation of organic waste at the processing and market facilities. Include sufficient waste management systems in the design of the facilities. Bidding documents to specify this requirement.	<p>Technical specification: Prescribe organic products or materials that can be recycled and reused to save energy and keep materials out of landfills, and that minimizes hazardous substances or emissions.</p> <p>Specifications to include waste management requirements in the design of the facilities.</p> <p>Bidder qualifications: To consider bidders that integrate sustainable practices into their procurement process.</p> <p>Bidding documents: Use of IFAD non-FIDIC bidding document for contracts under US\$5 million; OR borrower’s national bidding documents (supplemented by SECAP Standards as an annex*), as prescribed in IFAD Procurement Manual and Procurement Handbook.</p> <p>Bid evaluation: Bidders will receive more technical merit points in bid evaluation, if they: -have waste management certifications or standards; and/or -propose programs to reduce waste and promote a circular economy.</p> <p>Contract: Contract conditions shall require the contractor to prepare and submit a Plan for waste control and management onsite to the Supervisor/Engineer for approval</p> <p>Contract clauses to require contractors to track, recycle waste, and/or have composting options to manage waste that cannot be prevented.</p>
2.2 Could the project involve or	Moderate	Moderate	In the event that the project will	Technical specification:

<p>lead to primary not environmentally sustainable production of living natural resources? (Note: this includes the cultivation or rearing of plants or animals, including annual and perennial crop farming, animal husbandry (including livestock), aquaculture, plantation forestry, etc)</p>		<p>Project is fully dependent on production of living natural resources. Project is sited in an existing agricultural area, with low environmental and/or social sensitivity.</p>	<p>need to procure fingerlings, the contracts should include clauses to ensure that fingerlings are produced in an environmentally sustainable manner</p>	<p>To prescribe fingerlings that are produced in certified hatcheries to ensure that they are of good quality.</p> <p>Bidder qualifications: Previous experience in fingerling production and nursing in controlled systems.</p> <p>Bidding documents: Bidding documents will prescribe compliance with national environmental laws supplemented by SECAP Standard requirements as relevant.</p> <p>Bid evaluation: Bidders who use recirculating systems in their fingerlings production will receive more technical merit points in bid evaluation.</p> <p>Use of IFAD non-FIDIC bidding document for ICB contracts under US\$5 million</p> <p>Contract: Use of IFAD/ International Federation of Consulting Engineers (FIDIC) version of contract for international competitive bidding (ICB) contracts above US\$5 million. OR borrower’s national bidding documents (supplemented by SECAP 2 standards), as prescribed in IFAD manual & procedures of the IFAD Procurement Handbook. The supplementary SECAP requirements will be in the form of an annex to the particular conditions of contract and/or higher bidder qualifications, as relevant.</p>
<p>2.4 Could the project involve or lead to significant consumption of raw materials, energy, and/or water?</p>	<p>Substantial</p>	<p>Moderate The project will require consumption of raw materials, energy, and/or water. This will be a significant component of the project, but impacts can be appropriately managed.</p>	<p>There will be significant consumption of water for the aquaculture activities. Water sources will need to be identified for the siting and construction of ponds. The bidding documents will need to specify</p>	<p>Specifications The work specifications will prescribe the installation of water monitoring systems and the implementation of the integrated water resources management system.</p> <p>Bidding documents: will prioritize water and energy saving solutions and prescribe compliance with national environmental laws supplemented by SECAP</p>

			sustainable water sources for the pond construction. The project activities will also lead to increased energy consumption. Use of renewable energy will be promoted.	Standard 2 requirements as relevant. Bid evaluation: Bidders proposing renewal and/or energy saving solutions will receive more technical merit points in bid evaluation. Contract: Contract conditions to require contractor to integrate sustainable resource management practices during implementation.
2.5 Could the project involve or lead to significant extraction, diversion or containment of surface or ground water (e.g. construction of dams, reservoirs, river basin developments, groundwater extraction)?	Moderate	Moderate The project needs a considerable amount of groundwater or surface water. This will require a minor extension of existing sources. It includes construction of large-scale irrigation schemes rehabilitation/development – below 300 ha per scheme	In places where there could be a concentration of ponds, permits for water abstraction from surface water bodies may be required. Bidding documents to define when permits would be required	Specifications The work specifications will prescribe the installation of water monitoring systems and the implementation of the integrated water resources management system. Qualifications of bidders: Previous work experience in similar contexts. Bidding documents: will require compliance with national environmental laws including those related to licensing/obtaining relevant permits supplemented by SECAP Standard 2 requirements as necessary. Contractual conditions: For all works, the IFAD/FIDIC contract will be used. A prerequisite for excavation will be the completion of a groundwater study.
2.7 Could the project involve or lead to procurement, supply and/or result in the use of pesticides on crops, livestock, aquaculture or forestry?	Low	Minor The project only requires minimal amounts of pesticide.	There may be need to use chemicals to prevent disease outbreaks. The chemicals supplied should be on the approved list by relevant authorities.	Bidding documents: will prioritize water and energy saving solutions and prescribe compliance with national environmental laws supplemented by SECAP Standard 2 requirements as relevant.
Cultural Heritage	Risk Rating	Consequence	Guidance for SPOs	Mitigation Measures
3.3 Could the project involve or lead to significant excavations, demolitions, movement of earth, flooding or other	Moderate	Moderate Moderate impact on land. Some short-term earth moving, and environmental changes required. Rehabilitation is straight forward.	The ponds will be clustered in groups of 25 hence there will be significant movement of the earth while	Technical specification: Prescribe that the excavation shall be carefully executed as per the dimensions and elevations on drawing and the established 'Benchmark' at the site.

<p>environmental changes?</p>			<p>construction happens. The road rehabilitation will also result in earth movement. Bidding documents to include requirements and the contract clauses to include conditions for restoration of areas where ponds will be constructed, and roads rehabilitated.</p>	<p>Bidder qualifications: Previous work experience in similar contexts in the vicinity, or likelihood of presence of material heritage sites.</p> <p>Bidding documents: Will require compliance with national environmental laws including those related to licensing/obtaining relevant permits supplemented by SECAP Standard 2 requirements as necessary and they shall encourage the use of local knowledge.</p> <p>Contract: The contract shall require the contractor to have on site any and all needed materials to protect the open excavation and warn any persons in or near the excavated areas before any excavation work shall commence.</p> <p>For all Works, IFAD/FIDIC contract to be used and there should be additional supervision during the execution of contracts.</p> <p>The contractor shall be required to ensure backfilling and compacting of excavated areas immediately after excavation to limit exposure of loose soils.</p>
<p>Labour and Working Conditions</p>	<p>Risk Rating</p>	<p>Consequence</p>	<p>Guidances for SPOs</p>	<p>Mitigation Measures</p>
<p>5.4 Could the project: (a) operate in a sector, area or value chain where producers and other agricultural workers are typically exposed to significant occupational and safety risks, and/or (b) promote or use technologies or practices that pose occupational safety and health (OSH) risks for farmers, other rural workers or rural populations in general? (Note: OSH risks in agriculture might include: dangerous machinery and tools; hazardous chemicals; toxic or allergenic agents;</p>	<p>Moderate</p>	<p>Minor The project operates in a sector, area, or value chain where workers are occasionally exposed to significant OSH risks, and where regulation is known to be effective.</p>	<p>The project will source fish feeds and fingerlings from existing producers who in some cases do not have adequate personal protective equipment for their workers. Bidding documents should include requirements for Occupational Health and safety measures.</p>	<p>Work specifications: will prescribe measures to protect safety and health of occupants of the site, the surrounding community, and the environment post construction</p> <p>Bidding Documents will prescribe compliance with national labour laws supplemented by SECAP Standard 5 requirements as per thresholds prescribed in IFAD Manual & procedures of IFAD Procurement Handbook. The Supplementary SECAP requirements will be in the form of an Annex to the Particular Conditions of contract and/or higher Bidders' Qualifications, as relevant.</p> <p>Contract: The Supplier/contractor shall be required to provide a PPE to all its workers to protect them from occupational health hazards.</p>

<p>carcinogenic substances or agents; parasitic diseases; transmissible animal diseases; confined spaces; ergonomic hazards; extreme temperatures; and contact with dangerous and poisonous animals, reptiles and insects. Psychosocial hazards might include violence and harassment.)</p>				<p>Contract conditions will require contractors to have a health and safety policy and to conduct regular monitoring of health and working conditions.</p>
<p>Community Health, Safety and Security</p>	<p>Risk Rating</p>	<p>Consequence</p>	<p>Guidance for SPOs</p>	<p>Mitigation Measures</p>
<p>6.3 Is there a possibility of harm or losses due to failure of structural elements of the project (e.g. collapse of buildings or infrastructure)?</p>	<p>Low</p>	<p>Minor The project has only moderate reliance on buildings or infrastructure. Risk of failure is unlikely to lead to loss of life or significant environmental damage. The structural integrity of the required infrastructure has been independently verified.</p>	<p>There will infrastructure development in the project such as markets and the rehabilitation of production facilities. The bidding documents to include requirements on the building standards and technical design of the structures. Defect liability clauses will also be included in the contracts.</p>	<p>Technical specification: Prescribe the standards and technical designs of the structures.</p> <p>Bidder qualifications: Previous work experience in similar environments. Contractor to be duly registered for undertaking the relevant category of works.</p> <p>Bidding Documents: will prescribe compliance with national health & safety rules supplemented by SECAP Standard 6 requirements, as relevant.</p> <p>Use of IFAD non-FIDIC bidding document for ICB contracts under USD 5 million USD; OR borrower’s National Bidding Documents (supplemented by SECAP standards) as per thresholds prescribed in IFAD Manual & procedures of IFAD Procurement Handbook. The Supplementary SECAP requirements will be in the form of an Annex to the Particular Conditions of contract and/or higher Bidders’ Qualifications, as relevant.</p> <p>Contract conditions: -Contract conditions to include conditions to ensure a healthy and safe work environment and safe systems of work for site workers and the community. - For all Works, IFAD/FIDIC contract to be used and there</p>

				<p>should be additional supervision during the execution of contracts.</p> <p>-Defect Liability clause to be built into the contract.</p>
<p>6.7 Could the project lead to the potential for gender-based violence, including sexual harassment, exploitation and abuse, as a result of labour influx, land redistribution, or other actions that alter community dynamics?</p>	Moderate	<p>Moderate Moderate changes to community dynamics may result in increased potential for. Gender-based violence interventions are integrated into project design. gender-based violence or sexual exploitation</p>	<p>There will influx of migrant labour during the construction phases for the infrastructure. The bidding documents should require that the contractors give preference to employment of local labour and contracts will include clauses on zero tolerance of sexual harassment, exploitation and abuse.</p>	<p>Bidding documents: to require contractor to have a policy on prevention of sexual harassment, exploitation and abuse.</p> <p>IFAD's Policy on Preventing and Responding to Sexual Harassment will be clearly stated in all bidding documents and all suppliers and contractors will be required to comply with it.</p> <p>Contract: IFAD's Policy on Preventing and Responding to Sexual Harassment will be clearly stated in all procurement contracts and all suppliers and contractors will be required to comply with it by observing zero tolerance of sexual harassment, exploitation and abuse in procurement activities funded by IFAD.</p>
<p>6.8 Could the project lead to increases in traffic or alteration in traffic flow?</p>	Moderate	<p>Minor The project will result in minor increases in traffic volume. Only minor increase in risk of injury or death.</p>	<p>The rehabilitation of the roads and improving access to markets will result in increased traffic flows. The technical specification for the roads should include requirements for adequate signage to ensure safety and also traffic marshals to direct traffic flows during the road works.</p>	<p>Bidding document: will prescribe compliance with national health & safety rules supplemented by SECAP Standard 6 requirements, as relevant.</p> <p>Use of IFAD non-FIDIC bidding document for ICB contracts under USD 5 million USD; OR borrower's National Bidding Documents (supplemented by SECAP standards) as per thresholds prescribed in IFAD Manual & procedures of IFAD Procurement Handbook. The Supplementary SECAP requirements will be in the form of an Annex to the Particular Conditions of contract and/or higher Bidders' Qualifications, as relevant.</p> <p>Contract conditions: Prescribe that bidders should arrange his work to ensure the safe passage of the Traffic at all times and if necessary, construct and maintain an adequate diversion for traffic complete with all the necessary road traffic signs.</p> <p>The Contractor shall provide to the satisfaction of the Engineer adequate warning signs, temporary restriction signs,</p>

				<p>advance warning signs, barriers, temporary bumps and any other device and personnel equipped with two-way radios to ensure the safe passage of traffic through the works.</p> <p>When carrying out the Works the Contractor shall have full regard for the safety of all road users.</p> <p>The Contractor shall also provide signposts and maintain to the satisfaction of the Engineer all deviations necessary to complete the works.</p>
6.9 Could the project lead to an influx of project workers?	Moderate	<p>Moderate The project is partly dependent on an influx of project workers, but the majority of workers are local. Risks of impacts have been planned for, and protocols are in place</p>	<p>There will influx of migrant labour during the construction phases for the infrastructure. The bidding documents should require that the contractors give preference to employment of local labour.</p>	<p>Bidding documents: should require contractors to use local labour as much as possible to avoid influx of external/migrant workers.</p> <p>Bid evaluation: Employment and on-the-job training for unemployed youth and women above a defined percentage of the contractors' workforce must be rewarded with technical merit points in the bid evaluation.</p> <p>Contract: Work contracts to include insertion and training clauses for unskilled workers.</p>
Physical and economic resettlement	Risk Rating	Consequence	Guidances for SPOs	Mitigation Measures
7.4 Could the project result in impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	Moderate	<p>Moderate The project will result in moderate changes to land tenure arrangements and/or community-based property rights/customary rights. Legal recourse and other forms of arbitration/conflict resolution are available.</p>	<p>The project will involve construction of ponds and markets in specific locations. The land tenure arrangements will need to be established before any investment is made by the project.</p>	<p>Bidding documents: Work tender documents will require compliance with national legislation relating to land use laws.</p> <p>Bidding documents will prescribe compliance with national rules on physical & economic resettlement supplemented by SECAP Standard 7 requirements, as relevant.</p> <p>Contract: It should be a condition that a change of use process from private or community-based property rights to commercial should be done pursuant to undertaking sub-projects in compliance with physical planning and land use laws.</p>

PART IV: ANNEXES

ANNEX 1. TERMS OF REFERENCE FOR PMU STAFF

Project Manager

Reporting: Reporting to the Director General of IPA

Duty station

The duty station will be located in Cuanza Norte, in Angola, and the total duration of contract of eight years. It is estimated that the Project Manager would be present at least half of the time in the project selected municipalities in Bengo, Bié, Cuanza Norte, Malanje and Uíge provinces to support PPMUs.

The Project Manager will have the overall responsibility for the day-to-day activities of the Project. He/she will coordinate implementation of activities with other Project engaged in support for similar/related themes.

Background Qualifications and Experience

The specialist should have a university degree in economics or sociology, with ten years work experience, of which at least five years of practical experience is in management positions. He/she should have a sound knowledge of financial management, procurement and administrative systems, fishing, aquaculture, fish value chains and community development. He/she should have proactive and problem-solving skills, proven ability to lead a team of people with various backgrounds and communicate effectively with senior government officials and development partners. Good communication skills, written and verbal and fluency in both English and Portuguese.

Specific Responsibilities:

- ✓ Overall responsibility for an efficient implementation of the Project and in accordance with IFAD/government procedures;
- ✓ Lead the process of preparing AFAP-2 AWPBs and procurement plans for approval by the Project's oversight body;
- ✓ In liaison with the Procurement Officer, ensure that contractors are meeting their obligations and are paid only for agreed deliverables;
- ✓ Liaison with other institutions for all aspects related to the Project, especially the development and maintenance of partnerships with related Projects and Projects;
- ✓ final accountability for operation of Project bank accounts;
- ✓ Provide overall strategic guidance to other Project staff related to all aspects of AFAP-2 implementation;
- ✓ Coordinate and supervise functions and activities of the Project staff, ensuring that work disciplines and ethics are adhered to;
- ✓ Coordinate and follow up on the activities of the officers responsible for implementation of Project technical components to ensure effective delivery of Project activities;
- ✓ Ensure timely and appropriate reporting on progress and problems of Project implementation and submit progress reports to IPA on agreed deadlines;
- ✓ Providing leadership, guidance, enthusiasm and catalytic input to all levels of Project participants and activities, whenever appropriate;
- ✓ Ensure that the Service Providers (SPs) and all consultants and contractors engaged by comply with the Project's gender and targeting strategies;

- ✓ Approve all procurement and accounting transactions performed by the SPs that are within the authorised threshold, and facilitate disbursement of Project funds needed for the implementation of AFAP-2; and
- ✓ Undertake any other responsibility that will ensure smooth and effective implementation of the Project.

The following are desirable competencies:

- Strong leadership skills;
- Ability to work well in teams and to interact with a wide range of government institutions, private sector representatives and development partners;
- Knowledge of communication and KM;
- Strong written and oral communication skills;
- Excellent analytical skills;
- Open-minded and able to work independently, with limited supervision; and
- Fluency in Portuguese and English.

Finance Management Officer

The ToRs are included in the Financial Management Module of the PIM which is attached as a separate file.

Monitoring and Evaluation Officer

Reporting: Reporting to the Project Manager

Duty station

The duty station will be located in Cuanza Norte, in Angola, and the total duration of contract of eight years. It is estimated that the Project Coordinator would be present at least half of time in the project selected municipalities in Bengo, Bié, Cuanza Norte, Malanje and Uíge provinces to support PPMUs.

Background Qualifications and Experience of the M&E Officer

IFAD will hire a competent, energetic and committed individual interested in managing of M&E operations for the AFAP-2. The incumbent will be expected to meet the following requirements:

- University degree in statistics, international or rural development or other relevant discipline
- At least five years of experience and excellent track record in development programmes of which at least two in managing M&E systems
- Proficient in Portuguese, working knowledge of English desirable
- Computer skills especially statistical analysis using SPSS, Ms Access, Excel, among others and database management
- Communication, analytical and writing skills
- Good knowledge of Programme Cycle Management and Development

Scope of Technical Services

The project will be managed through a Project Management Unit within IPA. The project is looking for a competent and experienced Monitoring and Evaluation Officer to lead the manage all M&E processes, including the identification, documentation, processing and timely availability of relevant project data, that allows the project to track progress in implementation, results in all project target groups and project effects. Specifically the incumbent will be responsible for:

- Elaborating a detailed M&E Implementation Plan, elaborating from the M&E Plan elaborated in the project's design phase, in close collaboration with IFAD's M&E specialist and project programme officers, ensuring that all key indicators are identified at the onset of project operations, disaggregating as required, and in line with Government (IPA) M&E systems;
- Recruit one project data encoder;
- Recruit programmer to create databases required by the project for M&E purposes;
- Develop all necessary forms for data collection, report templates for all the different reporting levels, aggregation maps;
- Train any service providers and collaborators in M&E concepts and project requirements;
- Ensure that are data collection requirements are being met at high quality standards;
- Establish and implement a regular data quality verification system;
- In coordination with the Community Development Officer, ensure that data maps on activities implemented can adequately show if target groups are effectively being met (including gender and age group quotas within each target group);
- Ensure timely elaboration of complete data maps for regular analysis by programme staff, report elaboration and to inform planning cycles;

- In close coordination with the Project Manager and other project staff, prepare all data and other information required for annual meetings with communities, and participate in these meetings (with clusters of project target communities);
- In collaboration with Programme Officers, identify opportunities to contribute to the generation of knowledge, identifying and participating in relevant venues where project data can inform policy reflection, dialogue and development at national, regional and international level;
- Ensure that all M&E activities implemented, plans and needs are adequately reflected in project reports, plans and budgets;
- Coordinate the implementation of project special studies and surveys;
- Support the development of IPA´s M&E systems as appropriate; and
- Overall responsibility for the quality of all data produced by the project through its M&E system.

The following are desirable competencies:

- Ability to work well in teams and to interact with a wide range of government institutions, private sector representatives and development partners;
- Knowledge of communication and KM;
- Strong written and oral communication skills;
- Excellent analytical skills;
- Open-minded and able to work independently, with limited supervision.
- Fluency in Portuguese and English.

Knowledge Management Specialist

Reporting: Reporting to the Project Manager

Duty station

The duty station will be located in Cuanza Norte, in Angola, and the total duration of contract of eight years. It is estimated that the Project Coordinator would be present at least half of time in the project selected municipalities in Bengo, Bié, Cuanza Norte, Malanje and Uíge provinces to support PPMUs.

Background Qualifications and Experience

- The ideal candidate must have at least one degree on the following fields; fishery economics, fisheries extension or equivalent, development studies, business administration, management, international development, communication, rural development, fisheries economics, or related field, with proven experience working with M&E and in developing KM products;
- At least five (05) years of work experience in similar positions;
- Good understanding of value chain development;
- Solid knowledge and command of statistic packages (SPSS, STATA or others);
- Ability to write advanced drafts of success stories and evaluation studies;
- Experience in promoting communication systems and visibility of development programmes and initiatives;
- Demonstrated experience of developing results frameworks, indicators and M&E tools; and
- Advanced working knowledge and skills of MS Office (MS Word, MS Excel and MS Access)

Specific Responsibilities:

General:

- Develop and implement the Knowledge Management and Communication Strategy to ensure systematic and adequate communication and dissemination of Project interventions, results and impacts, continuous learning, improvement and knowledge sharing and learning;
- Ensure and overseeing, and guidance to PMU on the implementation of the Knowledge Management and Communication Strategy;
- Conduct mapping of relevant actors and stakeholders in the domain of communication and knowledge management, as well as seeking ways and options of engaging with them during the life cycle of the Project;
- Prepare and disseminate Project Publications and develop and maintain the Project website; and
- Ensure all preparatory and dissemination of the evaluation missions and knowledge sharing events using different methods of communication.

Project Communication and Visibility:

- Coordinate the overall process of transforming Project interventions in the targeted value chains into simply and impacting messages on the receptor's behavior, ensure documentation and dissemination;
- Identify and implement innovative approaches stimulating women and youth participation in the Project;

- Provide technical assistance and guidance to Project Implementing Partners on framing messages leading to artisanal fishing subsector and other value chain stakeholder's behaviour changing;
- Conduct mapping of relevant partners on mass media communication and explore options of engaging them in the dissemination of Project interventions;
- Design and implement tools and approaches for dissemination of Project interventions through specialized institutions in communication;
- Ensuring actions contributing and strengthening Project visibility in adequate manner;
- Assist PMU organizing events like steering committee meetings, value chain platform meetings, national and international knowledge sharing meetings as well as International Exchange and Learning visits involving the Project and other Projects or Programmes within and outside the country; and
- Document and disseminate information about National and International events (meetings, seminars, workshops, field days, etc.);

Knowledge Management:

- Assist in the development of appropriate knowledge management tools including case studies, success stories and impact studies;
- Participate and/or lead the process of documentation of qualitative and quantitative evaluation of the Project outcomes and impacts;
- On continuous basis identify relevant areas for knowledge exchanging and learning; (iv) Collect, collate, check, sort and undertake the some basic to intermediate level qualitative and quantitative analysis of the Project data on all field activities according to the reporting guidelines at district and provincial levels;
- Ensure systematization of information and data on Project lessons and hence contributing for improvement of policy formulation and implementations measures; (vi) Ensure a systematic filing of all Project documents;
- Conduct regular field visits and provide full feedback to field staff on M&E on the status of interventions, especially with regards to those relevant areas from the perspective knowledge sharing and learning;
- Working closely with M&E Specialist, continuously assess performance of the Project reporting and M&E System;
- Support knowledge management and dissemination activities of the Project in order to promote shared learning; and
- Undertake any other activities that are assigned by the Project Coordinator.

The following are desirable competencies:

- Ability to work well in teams and to interact with a wide range of government institutions, private sector representatives and development partners;
- Knowledge of communication and KM;
- Strong written and oral communication skills in English;
- Excellent analytical skills;
- Open-minded;
- Able to work independently, with limited supervision; and
- Fluency in Portuguese and English.

Procurement and Contracts Manager

The ToRs are included in the Procurement Module of the PIM which is attached as a separate file.

Aquaculture Specialist

Reporting: Reporting to the Project Manager

Duty station

The duty station will be located in Cuanza Norte, in Angola, and the total duration of contract of eight years. It is estimated that the Project Coordinator would be present at least half of time in the project selected municipalities in Bengo, Bié, Cuanza Norte, Malanje and Uíge provinces to support PPMUs.

Background Qualifications and Experience

The Aquaculture Expert should have demonstrated experience and knowledge of procedures applicable to multi- or bi-lateral financing. Experience in IFAD and World Bank's rules and procedures will be a surplus. The incumbent will need to meet the following requirements:

- Advanced (Post-graduate) degree in aquaculture or in a related subject but with additional training in aquaculture;
- At least ten (10) years of work experience, among which at least five (5) years working with small-scale aquaculture, preferably in Africa;
- Computer-literate and well versed in the use of Word, Excel and the Internet.
- Capable to work under difficult conditions in Malanje and other Project target provinces;
- Working knowledge of GIS, remote sensing and mapping is essential;
- Computer-literate and well versed in the use of Word, Excel and the Internet.
- Strong managerial skills and demonstrated capacity to manage people and interact with a wide range of private sector partners, public sector representatives, and development partners;
- Self-motivated, with demonstrated ability to take initiatives and work under a minimum of supervision, but also to work effectively as a member of a team;
- Excellent oral and written communication skills in English and Portuguese.

Scope of Technical Services

Among many other responsibilities, the Aquaculture Expert will undertake the following activities:

- Identify the socio-economic, environmental and governance issues and factors that may influence the selection of aquaculture areas;
- Oversee the potentials and limitations of the development of small-scale aquaculture in Angola;
- Planning, management and reporting of all activities of the AS team;
- Facilitate the identification of areas of major potential for aquaculture development through interpretation of the results of a mapping study (probably executed by FAO) and subsequent field visits for identifications of potential aquaculture communities;
- Assist the Project in recruitment of aquaculture extension workers
- Facilitate training of extension workers (on the job) in areas relevant for their work in the field, such as pond construction, pond management, fish feeding & growth and fish reproduction;
- Supervision of extension workers in promoting aquaculture initiatives at community level and organizing fish farmers groups;
- Coordinate the work of an (external) service provider hired by the Project for aquaculture component implementation

- Coordinate with the Procurement Specialist for the distribution of the goods and equipment for pond building and pond stocking (pond construction kits and pond stocking kits), including their purchase and storage in close collaboration;
- Provide technical guidance for the construction of a hatchery for the production of tilapia fingerlings and a feed mill for the production of fish feed;
- Coordinate the production of manuals to be used by extension workers covering pond construction, pond management, fish feeding and growth and fish reproduction;
- Manage special studies to be undertaken, including preparation of TORs and overseeing the work of the consultants hired by the project for Aquaculture ; and
- Liaise with Ministry of Fisheries employees and contribute to their efforts to review the Fisheries Law and Regulations and update their national aquaculture development strategy.

The following are desirable competencies:

- Ability to work well in teams and to interact with a wide range of government institutions, private sector representatives and development partners;
 - Knowledge of communication and KM;
 - Strong written and oral communication skills in English;
 - Excellent analytical skills;
 - Open-minded;
 - Able to work independently, with limited supervision; and
- Fluency in Portuguese and English.

Fisheries Specialist

Reporting: Reporting to the Project Manager

Duty station

The duty station will be located in Cuanza Norte, in Angola, and the total duration of contract of eight years. It is estimated that the Fisheries SApecialist would be present at least half of time in the project selected municipalities in Bengo, Bié, Cuanza Norte, Malanje and Uíge provinces to support PPMUs.

Background Qualifications and Experience

The Fisheries Specialist should have demonstrated experience and knowledge of procedures applicable to multi- or bi-lateral financing. Experience in IFAD or World Bank's rules and procedures will be a surplus.

The incumbent will need be expected to meet the following requirements as well:

- A postgraduate degree in Fisheries, Environmental Management or related fields and/or equivalent work experience;
- Proven practical experience, at least ten (10) years, in artisanal fisheries and aquaculture;
- Have a vision for the technological development and sustainable management of the inland fisheries;
- Have a good working knowledge and understanding of fish and aquatic processes and procedures;
- A good understanding of fish sampling technologies, statistics and modelling methodologies;
- Should have a proven training experience in innovative and selective fishing, processing, and conservation techniques;
- S/he should have working experience in artisanal fisheries and in promoting/improving fishing techniques and good practices in general to fishermen, especially those that are more adapted to inland waters, such as gillnetting, long lining and traps;
- S/he should also have working experience in promoting and improving fish processing, conservation techniques and good practices in general including dried/salted and smoking methods as well as on fish handling with ice;
- Have proven training and coordination skills to organise the work of teams operating in remote locations;
- Fluency in Portuguese and have excellent communication skills
- Have computer skills, specifically in Word, Spreadsheet and PowerPoint.

Scope of Technical Services

The Fisheries Specialist will contribute to the institutional strengthening of IPA and its representations in order to enable the institution to implement the activities developed by the project and sustain them in the future. The Senior Fisheries Specialist will be hired to support IPA institutional capacity strengthening, in general. Specifically, he/she will:

- Coordinate and supervise the fishing potential assessment that will contribute to the formulation of appropriate policies, strategies, and initiatives;
- Plan and build capacity to implement and supervise an inland fisheries zone management;

- Support the establishment of a fisheries management system (maps, tables for continuous inland fisheries monitoring assessment and evaluation);
- Provide the tools and technical expertise for data collection, management, analysis, interpretation and dissemination processes for fisheries, environmental and habitat modelling
- organize, coordinate and supervise the elaboration of fish resources management plans;
- Promote and provide training in fishing and fish technologies aiming at improving fishing and post-harvest activities;
- Provide appropriate training and other services to AFAP staff and government officials in matters relating to statistical modelling and data management;
- Work in collaboration with the PCU project coordinator to position inland fisheries sector nationally and create additional project opportunities;
- Supervise, review and update, if necessary, training methodology and ensured that the technologists and extension agents perform with competence and detect weaknesses in the extension system;
- Coordinate and supervise the process of site selection, design and construction of the handling/processing and market infrastructures supported by the project (in landing sites in lakes and along the river Kwanza), making sure they are adequately designed and built; support the local communities and authorities for their proper management and maintenance;
- supervise the demonstration activities aiming at the promotion of improved equipment and material for fish handling, processing and lead the process of developing Income Generating Activities on the basis thereof;
- Analyse on-going boat building activities and maintenance practices, and provide guidance for improvement and follow their implementation;
- Contribute to the preparation of the project annual work plan through consultation with fishermen, fish processors and traders;
- Work collectively with other project team members for a more effective implementation of the project activities;
- Carry out such duties as may be assigned by the Project Manager.

The following are desirable competencies:

- Ability to work well in teams and to interact with a wide range of government institutions, private sector representatives and development partners;
- Knowledge of communication and KM;
- Strong written and oral communication skills in English;
- Excellent analytical skills;
- Open-minded;
- Able to work independently, with limited supervision; and
- Fluency in Portuguese and English.

Business Development Specialist

Reporting: Reporting to the Project Manager

Duty station

The duty station will be located in Cuanza Norte, in Angola, and the total duration of contract of eight years. It is estimated that the Business Development Specialist would be present at least half of time in the project selected municipalities in Bengo, Bié, Cuanza Norte, Malanje and Uíge provinces to support PPMUs.

Background Qualifications and Experience

The Business Development Specialist should have demonstrated experience and knowledge of procedures applicable to multi- or bi-lateral financing related to promotion and coordination of business activities in the Project. Experience in IFAD or World Bank's rules and procedures will be a surplus. Specific responsibilities include:

- Capacity building project beneficiaries on business issues and other business-related aspects;
- Guiding service providers in provision of value chain support activities to target beneficiaries including the promotion of entrepreneurial skills in fish groups/cooperatives and other stakeholders;
- Facilitating in identification of capacity needs of the target beneficiaries and relevant value chain actors and designing training modules to address the gaps;
- Coordinating the development of marketing strategies not only for fish and fish products but also the requisite inputs and monitoring implementation of these strategies;
- Facilitating linkages and contracts between fish groups/cooperatives and business development service providers (stakeholders) including distributors, local promoters (for fish/fish products and inputs), etc.;
- Ensuring adequate synergies and linkages between providers of post-harvest management services, market support services and financial services of the Project, in collaboration with other Project Specialists;
- In liaison with the Knowledge Management Specialist, identifying and supporting innovative business models to ensure systematic documentation of the same for learning, adaptation and sharing through the project knowledge management system.
- In liaison with other Specialists, review business plans of the fish groups/cooperatives and other project groups and advising them on how to develop bankable business proposals for their enterprises;
- In liaison with M&E Officer, develop appropriate monitoring and evaluation tools and initiate appropriate impact surveys/studies;
- Support and train beneficiaries in effective enterprise organization and management with emphasis on business aspects of small-scale fisheries and good governance;
- Guiding the preparation and implementation of the various fisheries value chain related activities /studies.
- Participating in preparation of the Annual Work Plan & Budgets and periodic progress reports; and
- Undertake any other relevant duties assigned by the Project Manager.

Qualifications

- A Master’s degree in Agribusiness, Agricultural Economics, Finance, Business Administration or any other related /equivalent qualification from a recognized institution;
- Ten (10) years of working experience in a similar field, five (5) of which must have been at a senior Management position in donor funded projects;
- Demonstrated experience in facilitating business development, value chain analysis and building capacities of value chain actors;
- Demonstrated experience in working with communities in similar engagement;
- Team player and can work with minimum supervision;
- Knowledge of technologies and issues in value chain development, inclusive finance, business development and rural livelihoods;
- Strong computer skills; and
- Strong leadership and communication skills (oral and written).

Infrastructure Specialist (TA)

Reporting: The Infrastructure Specialist (TA) will report directly to the Project Manager.

Duty Station:

The duty station will be located in Cuanza Norte, Angola, with frequent travel to project sites in Bengo, Bié, Cuanza Norte, Malanje, and Uíge provinces. The total duration of the contract is eight years, with the Project Coordinator expected to be present at least half of the time in the selected municipalities to support Provincial Project Management Units (PPMUs).

Background Qualifications and Experience:

The Infrastructure Specialist (TA) should possess demonstrated experience and knowledge of procedures applicable to multi- or bi-lateral financing, preferably with experience in IFAD or World Bank's rules and procedures. As well as background in infrastructure development and clean energy access.

The incumbent will be expected to meet the following requirements:

- A postgraduate degree in Energy Systems, Electrical Engineering, Civil Engineering, Infrastructure Development, or related fields and/or equivalent work experience.
- Proven practical experience of at least ten (10) years in infrastructure development projects, with a focus on market access and rural infrastructure enhancement.
- Familiarity with project management methodologies and tools.
- Knowledge of institutional capacity building processes related to infrastructure development.
- Experience in working with governmental agencies, private sector partners, and development organizations.
- Strong communication and interpersonal skills.
- Fluency in Portuguese and English.
- Proficiency in computer skills, particularly in Word, Spreadsheet, and PowerPoint.

Scope of Technical Services:

The Infrastructure Specialist (TA) will contribute to the enhancement of market access and infrastructure establishment in Angola's inland fisheries and aquaculture sector. Specifically, the specialist will:

- Coordinate and supervise the implementation of infrastructure development projects, including the construction and rehabilitation of roads, fish landing facilities, and market infrastructure.
- Provide technical expertise in the design, procurement, and construction supervision of water supply canal systems for aquaculture.
- Support the establishment of smart fish kiosks and smart markets, ensuring the integration of renewable energy and sustainable infrastructure.
- Assist in the implementation of waste management solutions at smart markets, promoting circular economies within the value chain.
- Collaborate with relevant stakeholders, including government agencies, private sector partners, and development organizations, to ensure the effective implementation of infrastructure projects.
- Contribute to capacity building initiatives for local stakeholders involved in infrastructure development and management.
- Prepare progress reports, technical documents, and other relevant materials as required by the Project Manager.
- Perform any other duties as assigned by the Project Manager.

Desirable Competencies:

- Ability to work effectively in multidisciplinary teams and collaborate with a wide range of stakeholders.
- Knowledge of communication and knowledge management techniques.
- Strong analytical and problem-solving skills.
- Ability to work independently with limited supervision.
- Open-minded and adaptable to changing circumstances.
- Fluency in Portuguese and English.

By aligning with the objectives outlined in Subcomponent 2.2: Enhancing Market Access and Infrastructure Establishment, the Infrastructure Specialist (TA) will play a critical role in contributing to the success of the project and ultimately, in fostering economic development, food security, and poverty reduction in Angola's fisheries and aquaculture sector.

Community Development and Social Inclusion Specialist

Reporting: Reporting to the Project Manager

Duty station

The duty station will be located in Cuanza Norte, in Angola, and the total duration of contract of eight years. It is estimated that the Project Coordinator would be present at least half of time in the project selected municipalities in Bengo, Bié, Cuanza Norte, Malanje and Uíge provinces to support PPMUs.

Background Qualifications and Experience

IFAD will hire a competent, energetic and committed individual interested in leading the ambitious social component of this artisanal fisheries project. The incumbent will be expected to meet the following requirements:

- University degree in sociology, anthropology, international or rural development;
- At least seven years of experience and excellent track record in managing community development projects; and
- Proficient in Portuguese, working knowledge of English desirable.

Scope of Technical Services

The incumbent will be expected to lead all social activities in the context of the project. Specifically the incumbent will be responsible for:

- Collaborating with the rest of the PMU staff to ensure that all project strategies are adequately understood and ready to be implemented by the project management team;
- Ensuring that project strategies are adequately reflected in project annual plans and operations;
- Coordinating all social trainings to be carried out within IPA, project staff and service providers;
- In coordination with the Project Manager, elaborate the terms of reference of social service providers and ensure that contracts with contractors include all necessary provisions in terms of HIV/AIDS prevention component;
- Overseeing the quality of the work done by the service providers contracted for the different activities;
- Monitor progress of all social activities implemented and result attained;
- Ensuring that any and all support required in the field is provided in a timely fashion;
- Ensuring that all necessary disaggregation of data is being dully compiled, processed and used at local level for regular monitoring purposes and that all learning in dully documented;
- Collaborate with the Project Manager to ensure the successful that participatory planning, monitoring and evaluation activities;
- Ensure that progress and annual reports include critical and insightful analysis of project progress, results and unintended social and gender changes that could be taken place in target communities;
- Coordinate and support the conduction of any studies of social nature relevant to the project;
- Identify potential valuable linkages with partners;
- Promote synergies and collaboration; and
- Collaborate with other team members and IFAD in carrying out any additional task related to the success of the social aspects of the project.

Social Inclusion Responsibilities

- Advise and support the project manager, other members of the PMU and field officers in the effective mainstreaming of targeting, gender and social inclusion in project activities.
- Conduct the analysis of gender and social inclusion situation in the project locations, develop a comprehensive gender and social inclusion strategy and develop the action plan (that needs to be updated regularly) in coordination with the other PMU experts;
- Ensure assessments conducted under AFAP-2 will apply a gender and youth and disability-inclusive lens to identify bottlenecks hampering their successful participation in project activities;
- Provide technical oversight through training, coaching, and mentoring of Project staff on social inclusion;
- Facilitate the implementation of the gender sensitive programming, youth and disability inclusion activities in close collaboration with relevant stakeholders;
- Facilitate relevant and gender-sensitive, disability sensitive and youth-friendly trainings;
- Work with other PMU experts to critically review project design to see how each component and subcomponent addresses gender and social inclusion issues, and identify opportunities for strengthening implementation for a gender and social inclusion perspective
- Ensure planning and implementation of project activities particularly activities that require acquisition of land pass through genuine participation and the consent of people living on and around the land are sought prior to doing anything on their land
- Review basic project implementation processes to provide feedback and suggestions on how to achieve the best possible project outcomes with respect to targeting, gender equality and women’s empowerment, and social inclusion;
- Ensure that activities of the gender, targeting and social inclusion strategy are reflected in the following:
 - ✓ Preparation of the AWP/B
 - ✓ Design and implementation of the project M&E system
 - ✓ Project progress reports
 - ✓ Project supervision
 - ✓ Participate in the development of detailed ToRs and tender documents of national and local service providers to various project components to ensure that target groups will be able to participate effectively in all components and meet the project’s targets

Internal Auditor (TA)

The ToRs are included in the Financial Management Module of the PIM which is attached as a separate file.

Accountant

The ToRs are included in the Financial Management Module of the PIM which is attached as a separate file.

Procurement Assistant

The ToRs are included in the Procurement Module of the PIM which is attached as a separate file.

Monitoring and Evaluation Assistant

ToRs to be developed.

Project Assistant

Duties and reporting lines

Under the overall supervision of the Project Manager, the Project Assistant will be responsible for providing Project management and administration support to the PMU.

Tasks and responsibilities

- To effectively and efficiently provide secretarial services to PMU;
- Assisting the Project Manager with all Project communication issues, including the preparation and dissemination of the Project Publications Newsletter, and maintenance of the Project Website;
- Organizing, preparing and keeping records of proceedings of, and participating in Project meetings, which include Project Steering Committee Meetings, PMU Meetings and Annual Project Meetings; the minutes or records so prepared by the Project Assistant would have to be reviewed and sanctioned by the Project Manager prior to circulation;
- Assisting the Project Manager with following up implementation of recommendations of IFAD Supervision Missions;
- Making internal and external travel and accommodation arrangements as and when required for the PMU staff;
- Ensuring that all pieces of office equipment under the PMU are in good working condition through regular maintenance, and appropriate repairs;
- Keeping track of all utility bills and ensuring that these bills are paid on time;
- Establishing and maintaining both manual and electronic filing systems for safekeeping of Project records, contracts, personnel documents, etc.;
- Managing office supplies;
- Managing incoming and outgoing correspondences;
- Maintaining the PMU Petty Cash;
- Monitoring motor vehicle usage through analysis of mileage and fuel usage;
- Preparing and maintaining an updated database on Project staff vacation and other forms of leave;
- Supervising the Project Drivers; and
- Carrying out any other Project tasks as may be assigned from time to time by Project Manager.

Qualifications and Experience

- The job holder must possess a Grade 12 Full Certificate or equivalent with at least credit or better in English;
- He/she must have a Diploma in Business Administration, Public Administration, Office Management, Project Management, or a relevant field with appropriate experience;
- Bachelor's Degree in Business Administration, Public Administration, Economics, Project Management or a relevant field will be added advantage;
- Have a minimum of 3 years of work experience in a similar position (e.g., Project Assistant or Project Administrator);
- Have computer experience in Microsoft word, power point, excel and access, and electronic mailing;
- Be fluent in English with excellent writing skills; and
- Although project experience is not a critical requirement, experience in a similar or administrative position with donor or government funded projects, web site maintenance, and any relevant additional project management training will be added advantages.

Driver

Duties and reporting lines

The Project driver will report to the Finance Officer. A secondary reporting line exists to the Project Assistant.

Tasks and responsibilities

- Drive official vehicles of AFAP-2
- Keep his/her driving license valid and conform to the traffic code and meet requirements for driving motor vehicles driven by him/her;
- In case his/her vehicle is involved in accident, ensure that the necessary steps conforming to rules and regulations are taken;
- Responsible for the day to day maintenance and cleanliness of the vehicle in his/her charge;
- Keep the line managers informed of any irregular happening to the project vehicles and suggest the necessary steps;
- Inspect the vehicles' documentation, such as licensing, insurance, and inform the line managers as needed;
- Keeps records/logbook as required of the performance and cost of upkeep of the vehicle assigned to him/her;
- Assist in identifying and purchasing necessary spare parts for office vehicles;
- Undertakes minor repair of vehicles under the administrative custody of the project and obtain appraisals on cost of vehicle repairs;
- Transports official passengers/visitors and facilitates immigration and customs formalities as necessary;
- Support as messenger and responsible for safe carrying of pouches, mail or any documents, parcels or other articles entrusted to him/her for transporting as assigned by line managers;
- Assists in logistic work process as necessary, and flexibility in working hours and over the weekend, as may be needed;
- Performs any other tasks as appropriately assigned

Qualifications and Experience

- Completion of secondary education;
- Fluency in both English and Portuguese (written and spoken);
- Knowledge of driving rules and regulations;
- Basic elementary knowledge of motor machines and a valid driver's license;
- Ability to undertake minor vehicle repairs;
- Minimum of four years' driving experience with safe driving record;
- Experience working with National and or international Projects; and
- Ability to travel to the Project's target areas

ANNEX 2. TARGETING AND SOCIAL INCLUSION

Attached as a separate file.

ANNEX 3: IMPROVING HOUSEHOLD NUTRITION

Attached as a separate file.

ANNEX 4: TERMS OF REFERENCE OF DIFFERENT CONSULTANCIES/TECHNICAL ASSISTANCE

1. Terms of reference for Value Chain Analysis and Market Assessment

Overall objective of the study

A VC analysis and market assessment of the aquaculture and inland fisheries value chains will be conducted covering all five project provinces to identify key activities of the value chains, the main actors and challenges with the aim of prioritizing actions that can meet AFAP II objectives with the following outcomes:

- Outcome 1: Improved and resilient inland fisheries and small-scale aquaculture production, contributing to increased rural incomes;
- Outcome 2: Strengthened fisheries and aquaculture market linkages, entrepreneurship and infrastructure providing services; and
- Outcome 3: Strengthened institutions and policies for a sustainable and inclusive inland fisheries sector.

In particular, the Value Chain Analysis and Market Assessment should shed light on the status and viability of existing and potential markets for the aquaculture and inland fisheries value chains in question and determine the activities with the potential to support communities and households to improve their livelihoods and incomes using interventions that are beneficial to the management of the natural resource base, hold promise for product expansion, market viability, value addition opportunities, quality improvement, and input availability to smallholder farmers. The specific objectives are:

(a) Plan and conduct a Market Assessment and Value Chain Analysis focusing on:

- Identification of major local, regional and, if applicable and international, input/output market actors (consumers, sellers, traders, middlemen, etc.). Identify if there is overlap of provinces and/or farmer groups targeted by those market actors for potential bundled service delivery.
- Identification of producer groups/production areas. Run a light assessment of the identified producer groups by collecting data on: type of organization, level of formalization, number of farmers, financial health and if any services are provided to farmers.
- Assessment of size of markets, volumes of sale, market integration/segmentation.
- Identification of weakest linkages and bottlenecks in the supply chains and of opportunities to make it more productive (e.g. through improved flow of knowledge).
- Identification of the enabling environment and improved ecosystems including mapping of relevant local stakeholders (governments institutions, service providers) and their roles in activating and enhancing investments in the aquaculture and inland fisheries value chains.
- Local market structure and key risks/barriers in the enabling environment (e.g. information asymmetry, security issues or policies affecting market and finance access)
- Procurement mechanisms, market requirements (quality and other standards, conditions for delivery) and prices
- Identification of existing service delivery actors active in these value chains.
- Identification of specific opportunities for women and youth to be involved in these value chains.
- Identification of local businesses (processors, manufacturers) relevant for producers to connect with and what they can offer to the producers.

- Identification of possible new links that can be created and existing links that can be improved.
 - Analysis of the supporting functions that are required to make the value chains work, including both existing and missing support functions (e.g. infrastructure, information, related services)
 - Develop simple gross-margin analysis for the aquaculture and inland fisheries value chains.
 - Identify financing opportunities along the value chains as well as associated risks.
- (b) Write a Market Assessment and Value Chain Analysis report, which includes an executive summary and practical recommendations that can be used to inform the development of viable, sustainable, and locally appropriate strategies aimed at creating viable aquaculture and inland fisheries value chains that support targeted communities and households to improve their livelihoods and incomes. The set of recommendations should include actions, partnerships, and investments that are necessary to ensure the sustainable production and offtake of the produce (from farm-fork).

2. Terms of reference for Development of a private sector engagement strategy

For sustainability, the sub-component subsumes private sector-led approaches in delivery of the interventions. In this regard therefore, coordination and dialogue with individual private sector actors will be essential throughout the duration of the AFAP II. To achieve this, the project will engage the service of a consultant on a short-term basis to map out key stakeholders, carry out a highly consultative process with the key stakeholders, build on the recommendations and feedback to develop a private sector engagement strategy.

Overall objectives of the Assignment

The overall objective of this assignment is to facilitate the development and operationalization of a private sector engagement strategy for AFAP II. Specific objectives are:

- To map out, select, and validate key stakeholders to be consulted in the development of a private sector engagement strategy.
- To carry out an intensive consultative process with the identified key stakeholders to gather information, recommendations, and feedback on the development and operationalization of a private sector engagement strategy.
- To develop and validate a private sector engagement strategy and clear guidelines on its operationalization.

Scope of Works.

The consultant will work with the with the project to carry out the following functions, taking note that key stakeholders may spread beyond the administrative boundaries of the five AFAP II provinces.

- Contribute to the development of an instrument for the identification and validation of stakeholders and undertake a scoping exercise to identify the key stakeholders.
- Development of a methodology for gathering information during the consultative process.
- Undertake an intensive consultative process to:
 - Review and analyze existing strategies within the Lead Agency, IPA, if any on private sector engagement
 - Identify existing gaps and key strategic areas for strengthening collaboration and engagement with the private sector.

- Collect feedback and recommendations from identified stakeholders while assessing possible risks.
- Review and analyze information, feedback, and recommendations including possible ways to measure expectations from the partnerships.
- Develop and validate a strategy for proactive engagement with the private sector, including a framework for its operationalizations/ guiding principles for engagement.

Outputs or Deliverables

The following outputs are expected from the consultant’s activities:

- An inception report highlighting, the methodology to be adopted in the selection and validation of key stakeholders and for carrying out a consultative process with key stakeholders.
- Report on the consultative process carried out highlighting the existing information, gaps, feedback, and recommendations from stakeholders.
- Private sector engagement strategy developed and validated by key stakeholders.
- A framework for operationalization of the private sector engagement strategy developed.
- Final report and recommendations from the assignment.

3. Terms of Reference for Market Access Enhancement through Last-Mile Roads

Objectives:

The primary objective of this assignment is to oversee the construction and upgrading of last-mile all-weather roads to enhance market access for fish products. Specific objectives include:

- Construction and upgrading of last-mile all-weather roads to connect aquaculture farms and lagoon landing sites to trunk roads and markets.
- Implementation of gravelling and grading initiatives covering 100 kilometres per province, totalling 500 kilometres across project areas.
- Integration of climate resilience measures to enhance road durability and ensure all-weather passability.

Scope of Work:

The contractor/supplier will undertake the following tasks:

- Implement the construction, upgrading, and maintenance of last-mile all-weather roads and cambers/culverts etc.
- Collaborate with Municipal and Provincial Governments to oversee the construction, upgrading, and maintenance of last-mile all-weather roads.
- Develop detailed plans for road construction and upgrading, ensuring alignment with project objectives and budgetary constraints.
- Conduct regular site visits to monitor progress, identify challenges, and provide necessary guidance for successful implementation.
- Coordinate with relevant stakeholders, including aquaculture farms, lagoon landing sites, and market representatives, to ensure the effective connectivity of roads.
- Provide technical expertise on climate resilience measures and ensure their incorporation into road construction activities.

- Prepare comprehensive reports documenting project progress, challenges encountered, and recommendations for improvement.

Deliverables:

The contractor/supplier is expected to deliver the following outputs:

- Implementation and construction of last-mile all-weather roads and cambers/culverts etc
- Detailed plans for the construction and upgrading of last-mile all-weather roads.
- Regular progress reports outlining achievements, challenges, and recommended actions.

Qualifications and Expertise:

The contractor/supplier should possess the following qualifications and expertise:

- Extensive experience in civil engineering, with a focus on road construction and infrastructure development.
- Proven track record in managing similar projects, preferably in the context of rural development and market access enhancement.
- Strong understanding of climate resilience measures and their integration into road infrastructure projects.

Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

- Technical expertise and experience relevant to the assignment.
- Quality and feasibility of proposed methodologies and work plans.
- Demonstrated understanding of project objectives and stakeholder needs.
- Cost-effectiveness and value for money.

4. Terms of Reference for First Landing Point of Sale Facilities for Post-Harvest Efficiency

Background:

Efficient post-harvest management is essential for maximizing profitability and minimizing losses in the fishery sector. Establishing First Landing Point of Sale Facilities at selected lagoons is a crucial initiative to address post-harvest challenges. These facilities will serve as pivotal points for fish landing, processing, and sale, ensuring improved market access and economic viability for fisherfolk and stakeholders involved in the sector.

Objectives:

The primary objective of this assignment is to establish First Landing Point of Sale Facilities at selected lagoons to enhance post-harvest efficiency and profitability in the fisheries sector. Specific objectives include:

- Establishment of twenty-five (25) Fish Landing Point of Sale facilities at selected lagoons to reduce post-harvest losses and enhance profitability.
- Engagement of the private sector for competitive construction and equipping of facilities with necessary amenities and micro-processing facilities.
- Integration of water and renewable energy sources for sustainability and environmental impact reduction.

Scope of Work:

The contractor/supplier will undertake the following tasks:

- Implement construction of Fish Landing Point of Sale facilities, amenities and micro-processing facilities.
- Collaborate with relevant stakeholders, including fisherfolk groups, cooperatives, and local/municipal governments, to identify suitable locations for the establishment of Fish Landing Point of Sale facilities.
- Develop detailed plans for the construction and equipping of twenty-five (25) facilities, ensuring compliance with standards for post-harvest handling and processing.
- Ensure the integration of water and renewable energy sources into facility design and operations to enhance sustainability and minimize environmental impact.
- Provide technical expertise and support to facilitate the collaborative management of facilities by fisherfolk groups, cooperatives, and local/municipal governments.
- Conduct regular monitoring visits to assess progress, address challenges, and ensure the successful implementation of the project.

Deliverables:

The contractor/supplier is expected to deliver the following outputs:

- Implementation and construction of infrastructure activities
- Regular progress reports outlining achievements, challenges, and recommended actions.
- Detailed plans for the construction and equipping of twenty-five (25) Fish Landing Point of Sale facilities.

Qualifications and Expertise:

The contractor/supplier should possess the following qualifications and expertise:

- Extensive experience in civil engineering, with a focus on road construction and infrastructure development.
- Proven track record in managing similar projects, preferably in the context of rural development and market access enhancement.
- Experience in project management, with a focus on infrastructure development and stakeholder engagement in the fisheries sector.
- Knowledge of environmental sustainability principles and experience integrating water and renewable energy sources into infrastructure design and operations.

Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

- Technical expertise and experience relevant to the assignment, particularly in infrastructure development and stakeholder engagement in the fisheries sector.
- Quality and feasibility of proposed methodologies and work plans for the establishment and management of Fish Landing Point of Sale facilities.
- Demonstrated understanding of project objectives and stakeholder needs, with a focus on enhancing post-harvest efficiency and profitability in the fisheries sector.
- Cost-effectiveness and value for money in the construction and equipping of facilities

5. Terms of Reference for Smart Fish Kiosks and Smart Markets Integration:**Background:**

Efficient post-harvest management and market accessibility are critical for sustainable development in the fisheries sector. Introducing Smart Fish Kiosks and Smart Markets integrated with renewable energy and sustainable infrastructure aims to revolutionize market access, quality preservation, and marketing accessibility, particularly in rural areas. This initiative will not only reduce post-harvest losses but also strengthen linkages for accessing inputs and market information, thereby enhancing economic opportunities for stakeholders in the fisheries sector.

Objectives:

The primary objective of this assignment is to integrate Smart Fish Kiosks and Smart Markets equipped with renewable energy and sustainable infrastructure to enhance post-harvest efficiency and profitability in the fisheries sector. Specific objectives include:

1. Introducing Smart Fish Kiosks and Smart Markets in designated areas to provide intelligent outlets for fish sale, processing, and marketing.
2. Implementing temperature-controlled storage infrastructures powered by solar energy to minimize fish perishability and ensure product quality.
3. Constructing two Smart Markets in Dondo and Bengo, fully equipped with energy-efficient cold chain and processing facilities to serve as hubs for fish distribution and processing.

Scope of Work:

The contractor/supplier will be responsible for the following tasks:

1. Designing and implementing Smart Fish Kiosks and Smart Markets integrated with renewable energy and sustainable infrastructure.
2. Establishing temperature-controlled storage facilities using solar energy to preserve fish quality and reduce post-harvest losses.

3. Collaborating with stakeholders to identify suitable locations for the construction of Smart Fish Kiosks and Smart Markets.
4. Developing detailed plans for the construction and equipping of the Smart Markets, ensuring compliance with quality standards and sustainability principles.
5. Integrating water and renewable energy sources into the design and operation of Smart Fish Kiosks and Smart Markets to enhance sustainability and minimize environmental impact.
6. Providing technical expertise and support to facilitate the efficient management of Smart Fish Kiosks and Smart Markets.
7. Conducting regular monitoring visits to assess progress, address challenges, and ensure the successful implementation of the project.

Deliverables:

The contractor/supplier is expected to deliver the following outputs:

1. Implementation and construction of Smart Fish Kiosks and Smart Markets infrastructure.
2. Regular progress reports documenting achievements, challenges, and recommended actions.
3. Detailed plans for the construction and equipping of Smart Markets in Dondo and Bengo.

Qualifications and Expertise:

The contractor/supplier should possess the following qualifications and expertise:

1. Extensive experience in smart infrastructure and engineering, with a focus on infrastructure development and renewable energy integration.
2. Proven track record in managing similar projects, preferably in rural development and market access enhancement.
3. Expertise in project management, stakeholder engagement, and infrastructure development within the fisheries sector.
4. Knowledge of environmental sustainability principles and experience in integrating renewable energy sources into infrastructure design and operations.

Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

1. Technical expertise and experience relevant to the assignment, particularly in infrastructure development and renewable energy integration.
2. Quality and feasibility of proposed methodologies and work plans for the establishment of Smart Fish Kiosks and Smart Markets.
3. Demonstrated understanding of project objectives and stakeholder needs, with a focus on enhancing post-harvest efficiency and profitability in the fisheries sector.
4. Cost-effectiveness and value for money in the construction and equipping of Smart Fish Kiosks and Smart Markets.

6. Terms of Reference for Water Supply Canal Systems for Aquaculture

Background:

Effective water management is crucial for the success and sustainability of aquaculture activities. The construction of gravity-operated water supply canal systems presents an opportunity to enhance water management practices, ensuring adequate supply for aquaculture while promoting sustainability and community involvement.

Objectives:

The primary objective of this assignment is to establish gravity-operated water supply canal systems for aquaculture, aiming to improve water management practices and support the sustainable growth of the sector. Specific objectives include:

1. Construction of water supply canal systems to facilitate efficient water distribution for aquaculture activities.
2. Engagement of the fishing community groups in the management of these systems to ensure sustainability and promote local ownership.
3. Enhancement of water supply and sanitation facilities through the utilization of canal systems for productive use of water.

Scope of Work:

The selected contractor/service provider will undertake the following tasks:

1. Design and construction of gravity-operated water supply canal systems tailored to the needs of aquaculture activities.
2. Collaboration with relevant stakeholders, including government bodies and local communities, to identify suitable locations and ensure community participation in the project.
3. Development of detailed plans for the construction and management of water supply canal systems, adhering to industry standards and environmental regulations.
4. Integration of water quality management measures into the design and operation of canal systems to support healthy aquaculture practices.
5. Provision of technical assistance and capacity building activities to empower fishing community groups in the sustainable management of canal systems.
6. Implementation of monitoring and evaluation mechanisms to assess the performance and impact of constructed water supply canal systems.

Deliverables:

The contractor/service provider is expected to deliver the following outputs:

1. Construction and establishment of gravity-operated water supply canal systems for aquaculture.
2. Regular progress reports documenting achievements, challenges, and recommended actions.
3. Detailed plans outlining the design, construction, and management of water supply canal systems.

Qualifications and Expertise:

The contractor/service provider should possess the following qualifications and expertise:

1. Demonstrated experience in civil engineering and infrastructure development, particularly in water management projects.
2. Proven track record in managing similar projects, with an emphasis on community engagement and sustainability.
3. Expertise in aquaculture water management practices and environmental sustainability principles.
4. Knowledge of relevant regulations and standards governing water supply infrastructure projects.

Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

1. Technical expertise and experience in water management and infrastructure development.
2. Feasibility and effectiveness of proposed methodologies for constructing and managing water supply canal systems.
3. Understanding of project objectives and commitment to promoting sustainability and community involvement.
4. Cost-effectiveness and value for money in implementing the project.

7. Terms of Reference for Implementation of Waste Management Solutions:

Background:

Efficient waste management is imperative for sustainable development and environmental protection, particularly in industries such as fisheries and agric market/retail sector. Implementing waste management solutions is essential for creating circular economies within the value chain, reducing environmental pollution, and maximizing resource utilization. This TOR aims to outline the requirements for the successful implementation of waste management solutions in the fisheries agric market/retail sector.

Objectives:

The primary objective of this assignment is to introduce effective waste management solutions in the smart markets and other linked retailing points to promote environmental sustainability and resource efficiency. Specific objectives include:

- Introduction of waste management solutions at smart markets and processing facilities to create circular economies within the fisheries value chain.
- Integration of green, blue, and grey bin waste management techniques for the collection of organic and non-biodegradable waste.

- Utilization of collected organic waste for fish feed manufacturing, organic fertilisers and biogas generation to minimize waste and promote resource utilization.

Scope of Work:

The contractor/supplier will be responsible for the following tasks:

- Design and implementation of waste management solutions at smart markets, processing facilities, and other relevant sites within the fisheries sector.
- Incorporation of green, blue, and grey bin waste collection techniques for organic and non-biodegradable waste.
- Establishment of mechanisms for the collection, segregation, and utilization of organic waste for fish feed manufacturing and biogas generation.
- Collaboration with relevant stakeholders, including government agencies, fisherfolk groups, cooperatives, and local communities, to ensure the successful implementation of waste management solutions and sourcing wastes from the smart fish kiosks and other sources.
- Provision of technical expertise and support to facilitate the adoption and maintenance of waste management practices by stakeholders.

Deliverables:

The contractor/supplier is expected to deliver the following outputs:

- Implementation of waste management solutions at smart markets, processing facilities, and other identified sites within the fisheries sector.
- Documentation of waste management processes, including collection techniques, segregation methods, and utilization strategies.
- Training materials and capacity-building initiatives for stakeholders involved in waste management activities.
- Regular progress reports detailing achievements, challenges, and recommended actions for optimizing waste management practices.

Qualifications and Expertise:

The contractor/supplier should possess the following qualifications and expertise:

- Demonstrated experience in implementing waste management solutions, preferably in the context of the agric/ fisheries sector or or similar industries.
 - Expertise in waste collection, segregation, and utilization techniques, with a focus on environmental sustainability and resource efficiency.
 - Knowledge of circular economy principles and experience in integrating waste management practices into value chains.
 - Strong communication and stakeholder engagement, with the ability to collaborate effectively with diverse groups and organizations.

Evaluation Criteria:

Proposals will be evaluated based on the following criteria:

- Technical expertise and experience relevant to waste management solutions, particularly in the fisheries sector.
- Quality and feasibility of proposed methodologies and strategies for waste collection, segregation, and utilization.
- Demonstrated understanding of project objectives and stakeholder needs, with a focus on promoting environmental sustainability and resource efficiency.
- Cost-effectiveness and value for money in the implementation of waste management solutions within the fisheries sector.

8. Terms of Reference for The Establishment of an Effective Inland Fisheries Monitoring, Control and Surveillance (MCS)

The objective of the study is to ensure sustainable management of inland fisheries resources, combating illegal, unreported, and unregulated (IUU) fishing, or enhancing data collection for informed decision-making.

The scope of study should define the geographical scope of the MCS system, including the specific inland water bodies or regions to be covered and specify the target species or fisheries activities to be monitored within the scope of the system.

The consultant should

- i) identify and review existing national and international legal frameworks related to inland fisheries management and MCS, and determine the institutional arrangements and responsibilities of relevant authorities at national, regional, and local levels for implementing and coordinating MCS activities.
- ii) assess the technical infrastructure and capabilities needed for effective monitoring, including vessel tracking systems, surveillance equipment, data management software, and communication networks.
- iii) specify any requirements for capacity building, training, or technical assistance to ensure the proper operation and maintenance of MCS tools and equipment.
- iv) Define protocols and methodologies for collecting, storing, and analyzing fisheries-related data, including catch statistics, vessel movements, and environmental indicators.
- v) Determine the frequency and methods of data reporting and dissemination to relevant stakeholders, such as fisheries management authorities, researchers, and enforcement agencies.
- vi) Outline strategies and mechanisms for enforcing fisheries regulations and detecting and deterring illegal fishing activities, such as patrols, inspections, and surveillance operations.
- vii) Specify the roles and responsibilities of MCS personnel, including fisheries inspectors, law enforcement officers, and community monitors, in enforcing compliance with fisheries laws and regulations.
- viii) Identify key stakeholders, including government agencies, fishers' associations, non-governmental organizations, and local communities, and define their roles and responsibilities in supporting MCS efforts.
- ix) Develop mechanisms for consulting and engaging with stakeholders to ensure their active participation and support for the MCS system.

- x) Establish indicators and benchmarks for assessing the effectiveness and performance of the MCS system in achieving its objectives.
- xi) Define protocols for regular monitoring and evaluation activities, including data collection, analysis, and reporting, to track progress and identify areas for improvement.
- xii) Specify requirements for documenting and reporting on MCS activities, including regular progress reports, technical assessments, and recommendations for policy and management interventions.
- xiii) Define protocols for archiving and sharing relevant documents, data, and information to facilitate transparency, accountability, and learning within the fisheries management community.

9. Terms of Reference for the Development of a Participatory Inland Fisheries Data and Monitoring System

Objectives: i) develop a participatory inland fisheries data and monitoring system that engages local communities, government agencies, and other stakeholders. The system should improve the accuracy, completeness, and timeliness of inland fisheries data., ii) strengthen the capacity of relevant authorities (GEPE) in data collection and monitoring.

Scope of Work: i) Conduct a needs assessment to identify specific requirements and challenges related to inland fisheries data collection and monitoring. ii) Design and develop a user-friendly and participatory data collection system that integrates traditional knowledge and modern technology. iii) Implement a pilot program to test the effectiveness and feasibility of the proposed system. iv) Develop training materials and conduct capacity-building workshops for local communities and fisheries authorities. v) establish a feedback mechanism to continuously improve the system based on user experience and evolving needs, vi) Develop guidelines and protocols for data validation, analysis, and reporting.

Methodology: i) Engage in consultations with local communities, fisheries experts, and government agencies to gather insights and requirements, ii) Utilize a participatory approach in the design and development of the data and monitoring system, iii) Incorporate both traditional and modern data collection methods, considering the local context, iv) Collaborate with technology experts to ensure the system's compatibility with existing platforms and devices.

Deliverables: i) Needs assessment report detailing current challenges and requirements, ii) Detailed design document for the participatory data and monitoring system, iii) Piloted and tested data collection system in selected inland fisheries areas, iv) Training materials for local communities and fisheries authorities, v) Guidelines and protocols for data validation, analysis, and reporting, vi) Comprehensive final report documenting the entire process, including lessons learned and recommendations for future improvements.

Monitoring and Evaluation: i) Establish a monitoring framework to track progress against objectives, ii) Conduct regular evaluation sessions with stakeholders to gather feedback and make necessary adjustments.

Qualifications: The TA should have expertise in fisheries management, data systems development, and community engagement. The TA should be familiar with the local context and previous experience in similar projects is highly desirable.

10. Terms of Reference for the Development of a Lagoon Management Plan (LMP)

Background: i) Provide an overview of the current status and conditions of the inland lagoons, ii) Identify key stakeholders involved in lagoon management, iii) Highlight existing challenges and issues related to the lagoons ecological, social, and economic aspects.

Objectives: i) Develop a comprehensive Inland Lagoon Management Plan (LMP) that addresses environmental sustainability, biodiversity conservation, and community well-being, ii) Establish clear guidelines for the sustainable management and use of the lagoons resources, iii) Promote stakeholder engagement and participation in the planning and implementation process, iv) design an implementation pathway and framework for the LMP.

Scope of Work: i) Conduct a detailed ecological assessment and baseline survey of the lagoons, including water quality, flora, and fauna, ii) Identify and assess the socio-economic activities around each lagoon, including fisheries, agriculture, tourism, and local communities social structure, iii) Analyze existing legal and institutional frameworks related to inland lagoons management, vi) conduct frame surveys (FS), catch assessment surveys (CAS) to determine fishing pressure and fisheries statistics of the lagoons, vii) establish fish breeding areas/zones and strategize their management plans, viii) evaluate the suitability of the lagoons for cage aquaculture, indicating best cage location sites in the lagoons, ix) Engage in consultations with local communities, government agencies, NGOs, and other relevant stakeholders, and x) Develop a participatory and inclusive approach for the creation of the management plan.

Methodology: i) Undertake field surveys and scientific assessments to gather relevant data, ii) Organize stakeholder workshops, focus group discussions, and public hearings to incorporate local perspectives, iii) Collaborate with environmental experts, hydrologists, and social scientists to ensure a holistic understanding of the lagoon ecosystem, iv) Utilize geo-referencing technologies for mapping and monitoring the lagoons.

Deliverables: i) Ecological Assessment Report, including water quality analysis, biodiversity inventory, and habitat mapping, ii) Socio-economic Assessment Report, detailing the impact of various activities on the lagoon and its surrounding communities, iii) CAS and Frame survey report for the year the survey is done, iv) Participatory Consultation and Stakeholder Engagement Report, v) Lagoon Management Plan, including specific strategies for conservation, restoration, and sustainable use.

Monitoring and Evaluation: i) Establish a monitoring and evaluation framework to assess the implementation of the Lagoon Management Plan, ii) Conduct periodic reviews and adjustments based on feedback and changing circumstances.

Qualifications: The consulting firm or individual should have expertise in any of the following disciplines; Fisheries Science, Environmental science, Hydrology, and should be familiar with the local context and previous experience in similar projects is highly desirable.

11. Terms of Reference for Community Mobilization and Social Development

The consultant will be guided by the following terms of references. The objectives of this task includes:

- To enhance community mobilization in small-scale fisheries;
- To promote social development initiatives for sustainable fisheries, and
- To strengthen community participation and empowerment.

The consultant will develop a community mobilization strategy using clear objectives and identify key communication channels, community engagement methods and feedback mechanisms.

The specific responsibilities of the consultant include; i) conducting a baseline assessment of the current state of community mobilization, ii) identifying key stakeholders and their roles, iii) assessing existing community structures and organizations, iv) analysing social and economic dynamics within the fishing communities, v) develop and implement capacity-building programs for community members, and vi) facilitate the establishment of gender-sensitive and socially inclusive community social groups and enterprises.

The specific deliverables include: Community mobilization strategy document and community development groups, Social development program and implementation plans, and Gender and social inclusivity assessment report.

The qualifications for the consultant will be a degree in community development studies or equivalent from a recognized university. The consultant should demonstrate evidences of relevant experience in community mobilization and social development, particularly in the context of rural households.

12. Terms of Reference for Identification and Mapping of Aquaculture Suitability Areas

The primary objectives of this task include: i) To conduct a detailed assessment and mapping of areas suitable for aquaculture based on environmental, topographical, and hydrological factors and ii) To provide a comprehensive report outlining the suitability criteria and recommendations for aquaculture development in identified areas.

The process of activity implementation will be as follows :

Specific activities	Responsibility	Duration
Gather and analyzing existing data on environmental conditions, water quality, and topography,	Fisheries expert/TA	
Utilize geospatial tools and technology to map areas with high suitability for aquaculture,		
Conduct on-site assessments to validate and refine mapping results,		
Collaborate with relevant stakeholders, including local communities and authorities, to incorporate local knowledge and ensure community perspectives are considered		

<p>Develop a detailed report highlighting the mapped aquaculture suitability areas, including specific recommendations for sustainable development.</p>		
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Deliverables : The TA is expected to provide the following deliverables : i) Initial scoping report outlining the methodology and approach for mapping aquaculture suitability areas, ii) Georeferenced map indicating areas suitable for aquaculture, iii) Comprehensive report detailing the criteria used for mapping, validation process, and recommendations for aquaculture development in identified areas.

Qualifications : The consultant/firm should possess : i) Expertise in geospatial mapping and analysis, ii) Experience in conducting suitability assessments for aquaculture or related fields, iii) Knowledge of environmental and hydrological factors influencing aquaculture, and iv) Strong communication skills and the ability to engage with diverse stakeholders.

ANNEX 5: TECHNICAL ANNEX ON SMART KIOSKS

Introduction:

The Smart Fish Kiosk (SFK) initiative aims to revolutionize the retailing of fish and seafood by integrating renewable energy, sustainable infrastructure, and energy management technology. SFKs will serve as temperature-controlled infrastructures, reducing fish and seafood perishability in the developing world while promoting sustainable energy access, reducing food miles, and fostering social inclusion.

Objectives:

The objectives of the Smart Fish Kiosk (SFK) initiative are multifaceted. They include the implementation of SFKs equipped with essential features such as rooftop solar panels, cold storage facilities, and solar hot water access to improve the efficiency and sustainability of fish retailing. Additionally, the initiative aims to address various challenges within the agricultural/aquaculture value chain, including post-harvest losses, energy access, infrastructure for cold/warm storage, water access sanitation and hygiene (WASH), waste management, and market trading activities. Moreover, SFKs seek to empower youth and women by creating new opportunities in the fishery sector and facilitating value addition and commercial agribusiness. Furthermore, the initiative aims to implement innovative solutions for data analysis and disaggregation to prevent post-harvest losses and assess local food systems' commercial performance. Ultimately, SFKs aim to serve as critical link points in the agricultural/aquaculture value chain, promoting food security, and enabling efficient farm-to-fork distribution.

Design Structure and Energy Management:

The Smart Fish Kiosks (SFKs) are ingeniously crafted from repurposed 40-foot shipping containers, providing multifunctional spaces for cold storage, processing, and retailing activities. Embedded within these structures are indispensable elements such as rooftop solar panels, energy storage systems, water sources, refrigeration units, product displays, and secure containerized storage. Operating for a maximum of 14 hours daily, SFKs prioritize energy usage for cold storage, lighting, mobile charging, POS systems, signage, and processing equipment. Each SFK is equipped with a thermostat-regulated cold storage unit consuming approximately 600-700 W, complemented by additional loads totaling around 500 W at peak demand. Ensuring uninterrupted power supply, a 2 KW solar system installed on the rooftop, along with a 4 KW energy storage capacity, guarantees consistent operation, especially during periods of limited solar exposure.

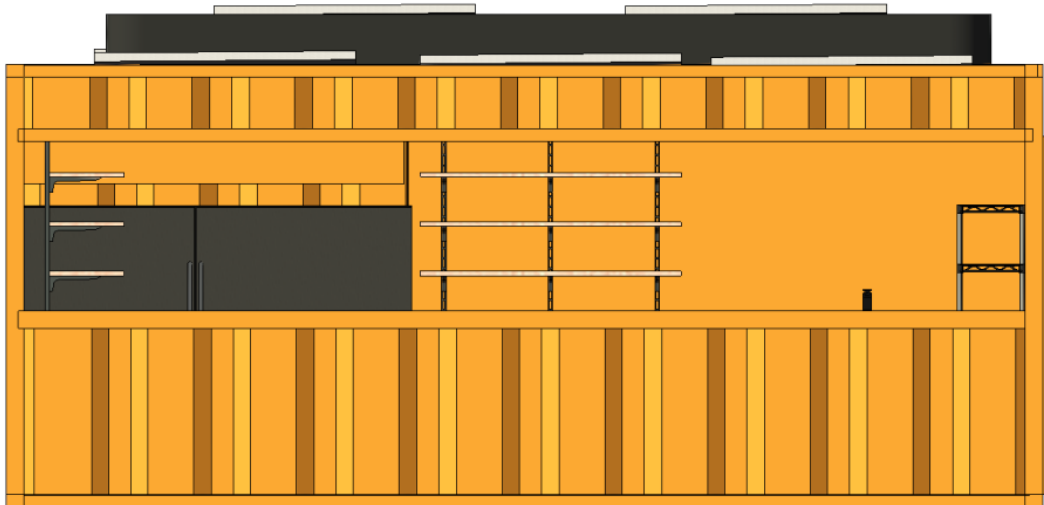
Construction and Implementation:

Design Structure and Energy Management for Smart Fish Kiosks (SFK) entails retrofitting shipping containers with essential infrastructure and equipment to ensure operational efficiency. This process adheres to site-specific designs and operational requirements. Locations are selected based on proximity to water sources, exposure to wind/breeze, elevation to avoid waterlogging, and availability of shading. Utilizing clean construction materials such as hoisting platforms, bricks, and sand ensures the SFK's stability and environmental compatibility. Design firms oversee construction works, providing necessary training on operation and maintenance to beneficiary groups, ensuring long-term sustainability and effective operation of the SFKs.

Handover and Maintenance:

Upon completion of the Smart Fish Kiosks (SFks), a minimum three-month liability period will be observed before transferring ownership to beneficiary groups. Comprehensive demonstrations on system operation and maintenance will be conducted to ensure proficiency among users. Subsequently, beneficiary groups will establish committees responsible for the day-to-day management, operation, and maintenance of the SFks, with user fees collected to support sustainable management practices. Continuous monitoring and support will be provided to guarantee the SFks' effective operation and long-term sustainability.

The Smart Fish Kiosk (SFk) utilising renewable energy, sustainable infrastructure, and energy management technology to deliver tailored place-based circular economies and reduce energy cost/emission in retailing of produce. This is targeted at achieving scalable sustainable energy, reduce food wastage in the agricultural/aquaculture value chain and provide equality, diversity, and social inclusion.

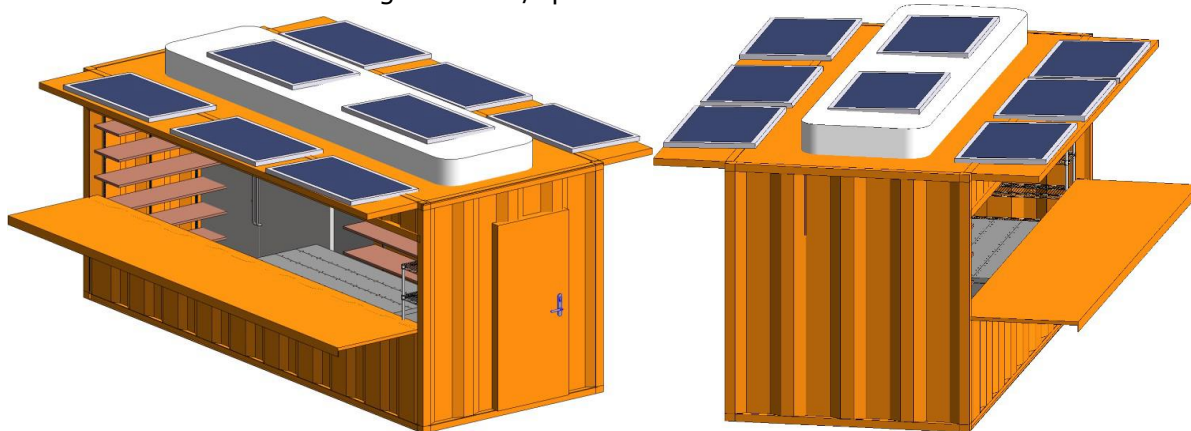


The Smart Fish Kiosk provides temperature-controlled infrastructures to reduce fish, and sea food perishability in the developing world. It effectively uses Solar Energy to deliver sustainable, affordable & reliable energy access to the kiosk whilst also reducing food-miles through on-site food storage. This is achieved by designing/building the kiosk with:

- roof-top solar panels that cater to various energy needs.
- cold storage facility
- solar hot water access
- retailing and display area
- produce storage/shelving.
- security of kiosk (containerised storage)
- shading

Smart Kiosk positively impacts the following areas of the agricultural/aquaculture value chain:

- Post-Harvest Loss
- Energy Access
- Infrastructure and cold/warm Storage
- Water Access Sanitation and Hygiene (WASH)
- Waste Management
- Market trading activities/operations



The Smart Fish kiosk infrastructure will a new/innovative process for food storage design and business case. Additionally, it will address issue of around:

- Youth and Women Empowerment – create new way of youth and women participation in the fishery sector, create value addition and commercial agribusiness opportunities with the sector. As well as, utilising the infrastructure for other vertical commercial opportunities.
- Fish and Post-Harvest Losses (PHLs) Data Analysis/Disaggregation – the infrastructure will provide simple and adaptive solutions for preventing PHLs and assessment of local food systems with regards commercial business performance as a result of the intervention
- As well as serving as a critical link point between getting fish products from farm to fork. Consequently, solving critical issues of food security. This is with creating the potential enabling environment for linking electric bikes/tricycles that deliver produce farm2market and market2home, through in-market charging point and/or vehicle charged battery replacement.

Design Structure and Energy Management:

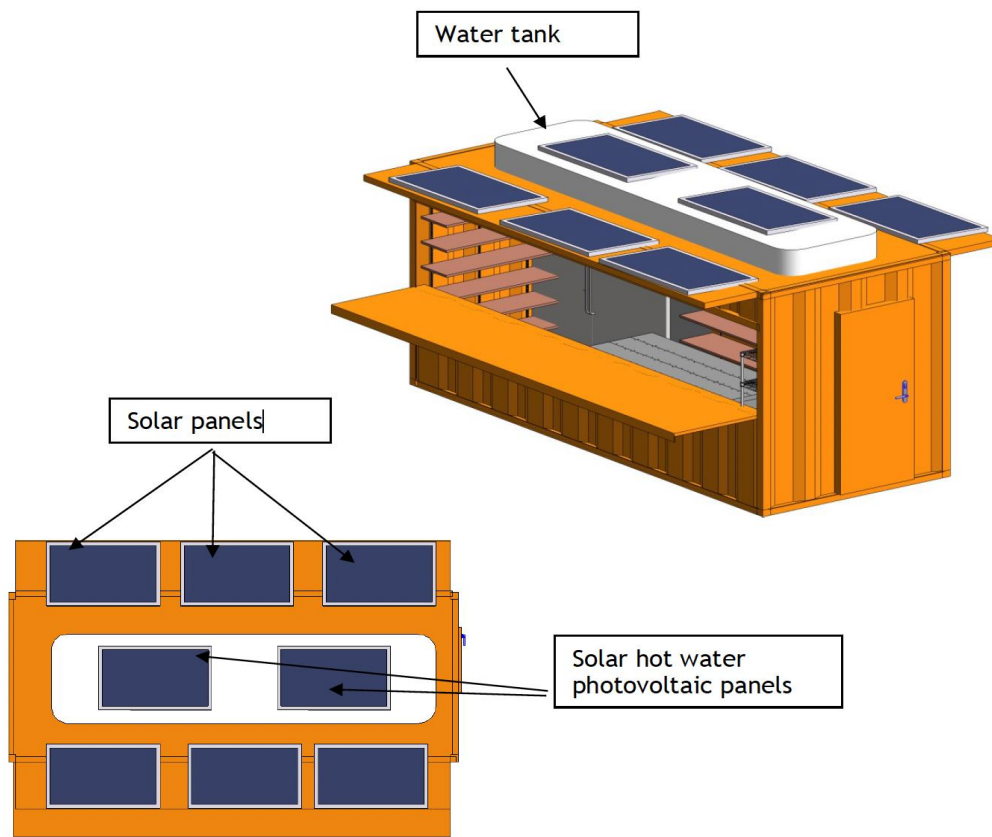
The infrastructure comprises repurposed 40-foot shipping containers transformed into kiosk systems, housing various operational activities such as cold storage, grinding, milling, cutting, and drying. These containers are equipped with solar panels, energy storage, water supply sources, refrigeration units, produce displays, preparation areas, rooftop solar panels, solar hot water access, produce storage/shelving, and secure containerized storage, along with access points for value addition equipment like grinders and dryers. Additionally, insulation materials are installed to minimize container heating and ensure an ergonomic environment.

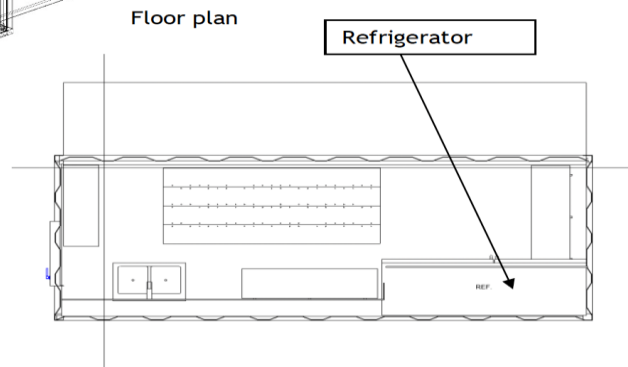
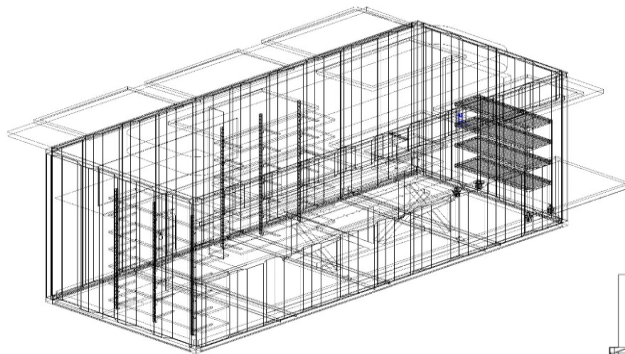
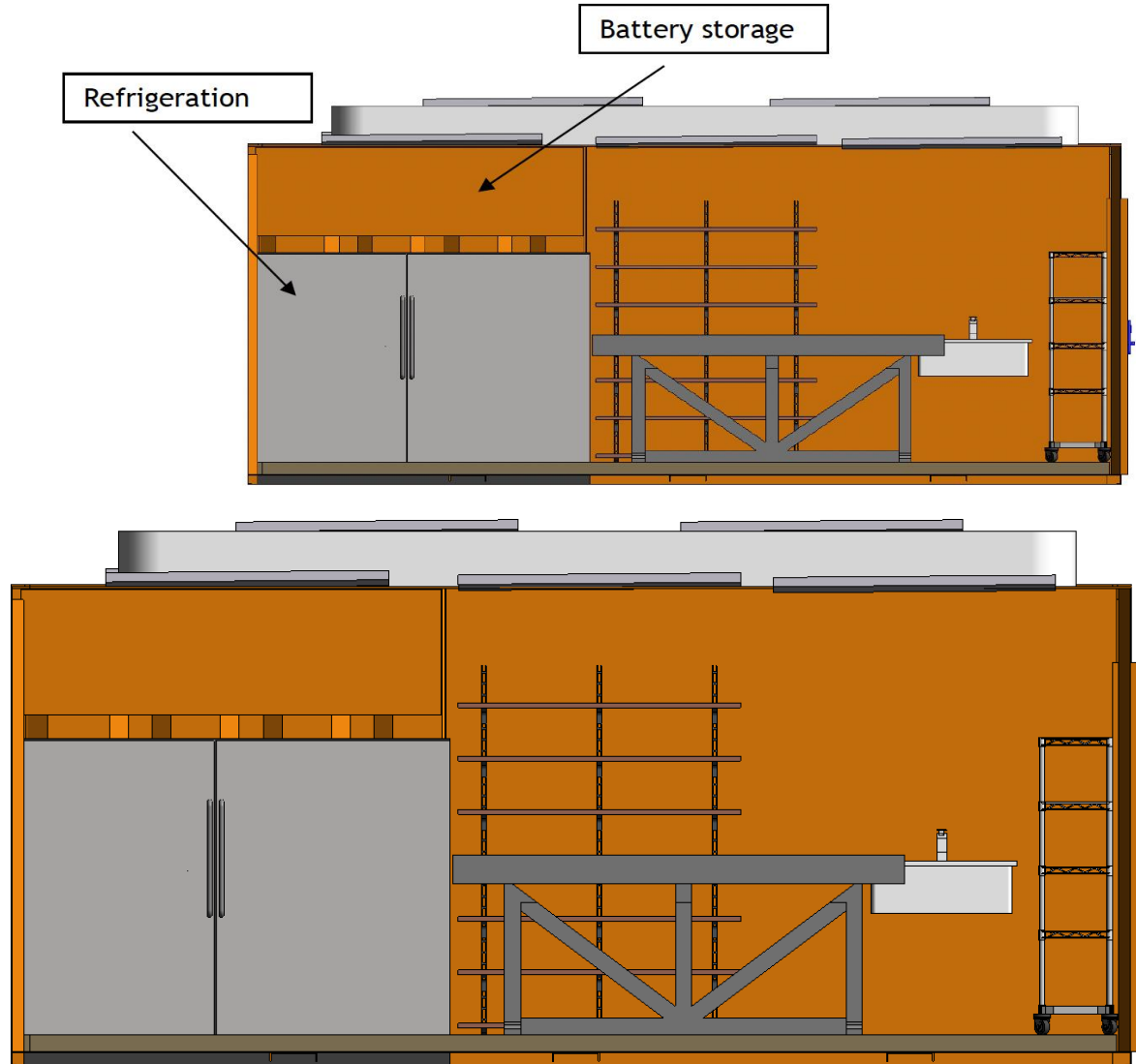
Operationally, a typical smart fish kiosk is estimated to operate for a maximum of 14 hours per day. The approach for the Smart Fish Kiosk's electric load is to install a thermostat-regulated 1000-liter cold storage unit with an estimated wattage consumption of around 600-700 W (0.6-0.7 KW), capable of maintaining temperatures between approximately -5 to -25

°C. This includes the addition of other loads such as lights, mobile charging, POS equipment, signage, grinders, and mixers, which consume an additional 500W (0.5 KW) at peak usage.

For energy generation, given the estimated total peak consumption of 1.2 KW per hour in the smart fish kiosks, the plan is to install a 2KW solar system on the roof of the kiosk, supplemented by an additional energy storage (battery storage) capacity of 4 KW. This setup will provide power during times of low solar penetration, such as during cloud cover or night-time operations, and for optimizing the temperature regulation of the thermostat-regulated cold storage facility.

The estimated coverage area for solar panels is about 12 square meters (around eight (8) panels delivering 250W per panel) and the batteries are safely housed in the container and operated at room temperature.





Business Model: Smart Fish Kiosks (SFK)

The Smart Fish Kiosks (SFK) business model aims to establish a sustainable and profitable venture in the fish retail sector for youths. It is expected to be ran by a team five (5) young persons that have underwent fish food handling and business development training and have demonstrated capacity/capability to deliver. With an initial investment of \$20,000, SFK will provide a convenient point of sale for fresh fish products sourced from the natural water bodies and aquaculture interventions and serve as a platform for aquaculture farmers to purchase inputs such as feeds.

Introduction:

SFK seeks to address the demand for fresh fish products while supporting local aquaculture farmers by providing a convenient and efficient sales channel. The business model is designed to maximize revenue, minimize costs, and ensure sustainability in operations.

Smart Fish Kiosks (SFK) will have two primary revenue streams: Firstly, through the direct sales of fresh fish products to customers at competitive prices, and secondly, by earning commissions on input sales, acting as a point of sale for aquaculture farmers to purchase inputs like feeds. Regarding the cost structure, the initial investment of \$20,000 will encompass infrastructure setup and equipment costs. Additionally, SFK will face ongoing operational expenses including utilities, maintenance, operator salaries, and stocking costs.

SFK's market analysis reveals a target demographic consisting of consumers seeking convenient access to fresh fish products and aquaculture farmers requiring inputs. Research indicates robust demand for fresh fish, particularly in town centres, peri-urban and urban areas, with SFK positioned to distinguish itself through quality, convenience, and personalized service vis-a-vis traditional fish markets and supermarkets. Operations will involve a team of five operators proficient in fish handling, customer service, inventory management, and sales. Cold storage management protocols will be established to maintain the freshness and quality of stored fish, while SFK will also oversee the sale of inputs like fish feeds to aquaculture farmers, ensuring streamlined inventory management and payment processing.

SFK will prioritize marketing and promotion efforts by establishing a strong brand identity focusing on quality, freshness, and convenience while utilizing various channels such as social media, local newspapers, flyers, and signage for advertising. Additionally, customer engagement strategies including loyalty programs, promotions, and personalized service will be implemented to foster relationships and drive repeat business. In terms of sustainability and compliance, SFK will prioritize sourcing fish from certified sustainable fisheries and minimizing waste through efficient inventory management, while ensuring compliance with local regulations and standards concerning food safety, hygiene, licensing, permits, and environmental sustainability.

Assumptive Profitability, Sensitivity and Break-Even Analysis

The profitability analysis of the Smart Fish Kiosks (SFK) business model reveals promising revenue potential, with projected monthly profits of \$1,200. This assessment is based on comprehensive considerations of revenue sources, including fish and input sales, against operational and infrastructure expenses. Moreover, a sensitivity analysis will be conducted

to gauge the impact of variable factors such as fish prices, operational costs, and sales volumes on SFK's profitability, ensuring a comprehensive understanding of potential risks and opportunities.

Furthermore, the break-even analysis is crucial in determining the point at which the \$20,000 investment in SFK infrastructure will be recouped. This analysis will provide insights into the timeframe required for cumulative profits to offset the initial investment, offering valuable guidance for financial planning and resource allocation. Additionally, given the socioeconomic context of Angola, where a significant portion of the population lives below the \$2.50 per day poverty line, it is imperative to ensure that SFK remains accessible while still achieving profitability, thereby contributing to economic development and poverty alleviation in the region.

In conclusion, the profitability, sensitivity, and break-even analyses collectively offer valuable insights into the financial viability of the Smart Fish Kiosks business model. By leveraging these insights to refine the business model, optimize revenue streams, and mitigate risks, SFK can not only achieve profitability but also foster sustainable economic growth and social impact in Angola. Continuous monitoring and adaptation of key performance indicators will be essential to ensure the long-term success and scalability of the SFK initiative.

ANNEX 6: GUIDELINES FOR PREPARATION OF ANNUAL WORK PLAN AND BUDGET AND PROGRESS REPORTS

Attached as a separate file.

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 Project Design Report

Annex 9: Integrated Project Risk Matrix (IPRM)

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

Overall Summary

Risk Category / Subcategory	Inherent risk	Residual risk
Country Context	Moderate	Moderate
<i>Fragility and Security</i>	<i>Low</i>	<i>Low</i>
<i>Macroeconomic</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Governance</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Political Commitment</i>	<i>Low</i>	<i>Low</i>
Sector Strategies and Policies	Moderate	Moderate
<i>Policy Development and Implementation</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Policy alignment</i>	<i>Moderate</i>	<i>Moderate</i>
Environment and Climate Context	Moderate	Moderate
<i>Project vulnerability to climate change impacts</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Project vulnerability to environmental conditions</i>	<i>Moderate</i>	<i>Moderate</i>
Project Scope	Moderate	Moderate
<i>Technical Soundness</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Project Relevance</i>	<i>Low</i>	<i>Low</i>
Institutional Capacity for Implementation and Sustainability	Substantial	Substantial
<i>Monitoring and Evaluation Arrangements</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Implementation Arrangements</i>	<i>Substantial</i>	<i>Substantial</i>
Project Financial Management	Substantial	Substantial
<i>Project External Audit</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Accounting and Financial Reporting</i>	<i>Substantial</i>	<i>Moderate</i>
<i>Project Internal Controls</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Funds Flow/Disbursement Arrangements</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Budgeting</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Organization and Staffing</i>	<i>Substantial</i>	<i>Moderate</i>
Project Procurement	Substantial	Substantial
<i>A.1 Legal, Regulatory and Policy Framework</i>	<i>Substantial</i>	<i>Substantial</i>
<i>A.2 Institutional Framework and Management Capacity</i>	<i>Substantial</i>	<i>Substantial</i>
<i>A.3 Accountability, Integrity and Transparency of the Public Procurement System</i>	<i>Moderate</i>	<i>Moderate</i>
<i>A.4 Public Procurement Operations and Market Practices.</i>	<i>Moderate</i>	<i>Moderate</i>
<i>B.1 Assessment of Project Complexity</i>	<i>Moderate</i>	<i>Moderate</i>
<i>B.2 Assesment of Implementing Agency Capacity</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Project Procurement Overall</i>	<i>Substantial</i>	<i>Substantial</i>
Environment, Social and Climate Impact	Moderate	Low
<i>Vulnerability of target populations and ecosystems to climate variability and hazards</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Greenhouse Gas Emissions</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Physical and Economic Resettlement</i>	<i>Moderate</i>	<i>Low</i>
<i>Community health, safety and security</i>	<i>Moderate</i>	<i>Low</i>
<i>Labour and Working Conditions</i>	<i>Moderate</i>	<i>Low</i>

Risk Category / Subcategory	Inherent risk	Residual risk
<i>Indigenous People</i>	<i>Low</i>	<i>Low</i>
<i>Cultural Heritage</i>	<i>Moderate</i>	<i>Low</i>
<i>Resource Efficiency and Pollution Prevention</i>	<i>Moderate</i>	<i>Moderate</i>
<i>Biodiversity Conservation</i>	<i>Moderate</i>	<i>Moderate</i>
Stakeholders	Substantial	Substantial
<i>Stakeholder Grievances</i>	<i>Substantial</i>	<i>Substantial</i>
<i>Stakeholder Engagement/Coordination</i>	<i>Moderate</i>	<i>Moderate</i>
Overall	Moderate	Moderate

Country Context	Moderate	Moderate
<i>Fragility and Security</i>	<i>Low</i>	<i>Low</i>
Risk: Country is not currently classified as a fragile state and no insecurity has been reported.	Low	Low
Mitigations: Keep liaison with the resident UN agencies to keep updated of security conditions on the ground and react as and when warranted.		
<i>Macroeconomic</i>	<i>Substantial</i>	<i>Substantial</i>
Risk: Angola's economy has undergone a modest recovery since the height of the coronavirus pandemic, and the economic outlook is positive. The EIU is projecting a real GDP growth of 3.5% in 2023, up from 3% in 2022. The removal of COVID-19 related restrictions, the lagged impact of macroeconomic reforms, and the government's efforts to diversify the economy boosted non-oil growth, especially in agriculture and services. The country has vast mineral and petroleum reserves, and its economy is among the fastest-growing in the world. The projected growth will be supported by the still high international oil prices. But a combination of a weakening kwanza and subsidy cuts is reviving expectations of persistently high inflation.	Substantial	Substantial
Mitigations: The continuing high world oil prices will result in low external financing needs during the projected period (2023-26), making the country comfortable to make debt repayments while the positive economic outlook makes debt rollovers seamless. The fact that project funds will be designated in foreign currency will serve as a hedge against the expected inflationary pressures.		
<i>Governance</i>	<i>Substantial</i>	<i>Substantial</i>
Risk: Angola scored 33 points out of 100 on the 2022 Corruption Perceptions Index reported by Transparency International. Thus, the country still has a long way to go to create an environment of comfort with regard to governance and accountability of government/project resources.	Substantial	Substantial

<p>Mitigations:</p> <p>Mitigations: The following steps will be undertaken: a) establishment of Provincial Governance Committees (PGCs) and these will include representatives from traditional and community leaders as well as civil society; b) ensure that the project puts in place an operational and effective Internal Audit function; c) through the implementation of IFAD's Framework for Operational Feedback from Stakeholders, more inclusive governance, transparency and accountability in development processes, including in associated grievance redress mechanisms, will be fostered. Information about the existence and functioning of such mechanisms will be made readily available to all stakeholders. Further, information regarding whistle-blower protection measures, and confidential reporting channels will be widely accessible in order to receive and address grievances appropriately, including allegations of fraud and corruption, and sexual exploitation and abuse.</p>		
<p>Political Commitment</p>	<p>Low</p>	<p>Low</p>
<p>Risk:</p> <p>Angola has been politically stable since the end of the civil war in 2002. On 24th August 2022, Angola held its fifth general elections; the incumbent political party was retained in power. Thus, there is less risk about a drastic change of the key policy direction.</p>	<p>Low</p>	<p>Low</p>
<p>Mitigations:</p> <p>Implement the project through existing government institutions at the national and provincial levels and provide capacity building support, where needed, with regard to institutions and the policy environment.</p>		
<p>Sector Strategies and Policies</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Policy Development and Implementation</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Risk:</p> <p>While there are some fisheries-specific policies in place, the food and nutrition security strategy has been developed but not yet approved; hence, this is an area that remains of concern.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>This is one of the areas the project will allocate funds to support the approval of the strategy by the parliament and, eventually, develop Food and Nutrition security policy.</p>		
<p>Policy alignment</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Risk:</p> <p>The country has developed a new National Development Plan (NDP 2023-2027); some of the other sector specific policies and strategies are in place.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>Ensure design alignment with existing policies, strategies and acts. If other policy aspects develop after the design, realign during the MTR.</p>		
<p>Environment and Climate Context</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Project vulnerability to climate change impacts</p>	<p>Moderate</p>	<p>Moderate</p>

<p>Risk:</p> <p>Risk: a) Rising temperatures can directly impact the health and growth of farmed fish. Aquaculture species may become stressed or even experience mortality if the water temperatures exceed their optimal range; b) Changes in rainfall patterns can lead to fluctuations in water levels and salinity, affecting the water quality in aquaculture ponds and impacting the growth and reproduction of farmed species; c) Angola is prone to extreme weather events, like storms and floods. These events can damage aquaculture infrastructure, lead to fish escapes, and disrupt operations, resulting in economic losses; d) Climate change can alter the prevalence and distribution of pathogens in aquatic environments, increasing the risk of disease outbreaks in aquaculture facilities; e) Changes in precipitation patterns and increased evaporation can lead to water scarcity, affecting the availability of water for aquaculture operations; and f) Climate change impacts can lead to changes in the abundance and distribution of fish populations, potentially disrupting ecosystem dynamics and affecting the availability of fish species for aquaculture</p>	Moderate	Moderate
<p>Mitigations:</p> <p>Adopting climate-smart aquaculture practices that consider changing environmental conditions and promote sustainable water use; b) Using species that are more resilient to temperature fluctuations and other climate stressors; c) Improving water management strategies to cope with changing rainfall patterns and potential water scarcity; d) Enhancing infrastructure design to withstand extreme weather events and minimize the risk of fish escapes; e) Monitoring and early warning systems to detect changes in water quality and disease outbreaks; and f) Strengthening capacity building and knowledge sharing among aquaculture stakeholders to adapt to climate change impacts.</p>		
<p>Project vulnerability to environmental conditions</p>	Moderate	Moderate
<p>Risk:</p> <p>Land clearing for aquaculture ponds can result in habitat destruction, particularly in mangrove and wetland areas. This can lead to the loss of critical ecosystems and negatively impact biodiversity; b) Poor water quality can negatively impact the health and growth of farmed fish. Pollution from agricultural runoff, industrial discharges, and improper waste management can lead to eutrophication, low dissolved oxygen levels, and waterborne diseases, affecting the productivity of aquaculture operations; c) Angola experiences seasonal variations in rainfall and temperature, which can impact water availability and quality in aquaculture ponds. Droughts or heavy rains can disrupt water supply and lead to stress on the farmed species; d) Environmental conditions can influence the prevalence and spread of diseases in aquaculture systems. Poor water quality and stress on farmed species can increase their vulnerability to diseases, leading to potential losses in production.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>Implementing sustainable water management practices to maintain water quality and availability; b) Establishing disease monitoring and biosecurity measures to prevent and control disease outbreaks; c) Engaging in climate-smart aquaculture practices that consider changing environmental conditions and promote resource efficiency; d) Conducting environmental impact assessments and development of ESCMPs adhering to best management practices to minimize the ecological footprint; and e) Afforestation and reforestation in areas around ponds.</p>		
<p>Project Scope</p>	Moderate	Moderate
<p>Technical Soundness</p>	Moderate	Moderate
<p>Risk:</p> <p>The risk that AFAP-2 is too complex, overambitious/lack of ambition, not innovative enough, inadequate incorporation of lessons learned and best practices, etc.</p>	Moderate	Moderate

<p>Mitigations:</p> <p>The AFAP-2 is simple; two technical component with a total of subcomponents that are clearly linked with each other and to the associated outputs and outcomes. The design was based on lessons learnt from AFAP and other projects in the country and/or the region. AFAP-2 is promoting innovations that were tested and proven by AFAP and other relevant projects elsewhere.</p>		
<p>Project Relevance</p>	Low	Low
<p>Risk:</p> <p>The risk that AFAP-2's objectives and interventions are not well aligned with national development or IFAD priorities, and/or are not sufficiently relevant or responsive to the needs and priorities of the intended target group throughout the project's lifespan.</p>	Low	Low
<p>Mitigations:</p> <p>Ensure a consultative process (including all key stakeholders – target beneficiaries, GoA (national and provincial), GoA's other development partners, private sector service providers, non-government organisations, etc.) during the conception and design stages. Design and implementation will be in alignment with the relevant GoA's and IFAD's policies, strategies, acts, etc.</p>		
<p>Institutional Capacity for Implementation and Sustainability</p>	Substantial	Substantial
<p>Monitoring and Evaluation Arrangements</p>	Substantial	Substantial
<p>Risk:</p> <p>Risk: The project is likely to be confronted with weak implementation capacity both at national and at provincial level, like other projects in Angola. The M&E system in AFAP and generally for other projects in Angola also did show weaknesses in terms of data gathering, update, completeness and analysis. As we have seen in present and past projects, this is likely to affect the quality of project implementation and the pace of reporting the milestones achieved.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>Mitigations: The project will actively invest in capacity-building efforts at the provincial and national levels to foster M&E skills within the country, thereby ensuring the project's longevity and sustainability. To facilitate this, the project will enlist the expertise of an M&E officer with a range of responsibilities. This officer will play a pivotal role in supporting the development of annual work plans and budgets, preparing a comprehensive M&E framework aligned with IFAD guidelines that encompass both qualitative and quantitative measures. Additionally, the officer will oversee and execute M&E activities outlined in the AWPB, with a particular focus on tracking results, making sure the indicators being used are aligned to the IFAD's Core Indicator guidelines and also to the ORMS system. They will also ensure capturing of valuable lessons learned and identifying best practices. These strategic measures are poised to fortify the project's resilience against the risks associated with an ineffective M&E system, guaranteeing ongoing monitoring and evaluation of the project's performance.</p>		
<p>Implementation Arrangements</p>	Substantial	Substantial
<p>Risk:</p> <p>Capacity of some of the implementing agencies is low. The ability to recruit and retain staff is weak and, as such, the rate of staff turnover tends to be high.</p>	Substantial	Substantial

<p>Mitigations:</p> <ul style="list-style-type: none"> □ One of the limiting factors to effective implementation was the availability of extension staff. Under AFAP-2, IPA has agreed to identify its own staff who will be trained by the Project and this intervention will overcome the issue of limited availability of extension agents; □ AFAP-2 has provisions for capacitating the different implementing agencies at the national and provincial levels; □ For a more structured addressing of existing capacity institutional gaps, a capacity needs assessment will be undertaken and a corresponding capacity development plan prepared in order to appropriately address the underlying capacity gaps. □ To address the issue of high staff turnover, AFAP is set to initiate a robust recruitment strategy aimed at attracting effective leaders. These leaders will be instrumental in cultivating a positive work environment, refining the employee onboarding process, and bolstering employee engagement. Our goal is to establish a fulfilling and supportive atmosphere for all staff members. This initiative marks a significant shift from previous practices, where project coordinators were selected without a competitive recruitment process, resulting in a gap in leadership capabilities. 		
Project Financial Management	Substantial	Substantial
Project External Audit	Substantial	Substantial
<p>Risk:</p> <p>(i)Lack of risk-based approach in PFM systems. Lack of information to verify the scope and methodology of audits carried out by the Court of Accounts (SAI) or the capacity of the Court of Accounts.</p> <p>(ii)Risk of late submission of external audit submissions and delays in implementation of audit recommendations. In addition, scope of the audit may not effectively cover higher risk activities and UN Agencies.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>(i)The project's financial statements will be audited by an independent audit firm acceptable to IFAD in accordance with international auditing standards.</p> <p>(ii)Early engagement of the external audit firm to avoid late audit submissions and audit TORs to be cleared by IFAD. A well-defined audit scope that targets the specific areas where risks are most likely to be present. It also ensures the audit is efficient and pinpointing where attention is needed most.</p> <p>(iii) Submission of audit reports and the management letter within 6 months after the end of each financial year.</p>		
Project Accounting and Financial Reporting	Substantial	Moderate
<p>Risk:</p> <p>(i)SIGFE, the government accounting software is not able to generate financial reports as per the project activities and IFAD requirements.</p> <p>(ii)The PRIMAVERA Accounting Software used in AFAP-I was very basic, with no budget, procurement, or fixed asset modules and part of the accounting and reporting was done manually by exporting data to Microsoft Excel, which was prone to errors.</p> <p>(iii)Risk of delays in submission of quarterly IFRs and unaudited financial statements.</p> <p>(iv) Possible collaboration with FAO and WFP is foreseen at design. In case of collaboration, there is a risk that financial management requirements including financial reporting may not be in compliance with IFAD requirements.</p>	Substantial	Moderate

<p>Mitigations:</p> <p>(i) Procurement of a new accounting software that will be able to record and report information as per IFAD's requirements. Preferably, ERP system (PHC), which is also used by on-going IFAD projects. The accounting software will include a budget, procurement, and enhanced financial reporting module, which is capable of generating IFRs as per IFAD requirements. IFRs format will be agreed with IFAD. The procurement of the software will be condition for first disbursement.</p> <p>(ii) Project's annual financial statements will be submitted to IFAD within four months after the financial year-end and the quarterly IFRs will be submitted to IFAD within 30 days after the quarter end.</p> <p>(iii) In case of collaboration with UN agencies, all FM rules that applies to the Borrower shall also be included in the project agreement signed between the Government and the UN Agency.</p>		
<p>Project Internal Controls</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Risk:</p> <p>(i) Lack of an internal audit function to determine compliance with internal control provisions, rules and regulations.</p> <p>(ii) Risk of funds not being used for intended purposes, including municipality and province level.</p> <p>(iii) Grants allocated under sub-component 2.1 will be implemented in collaboration with INAPEM and DCRD. Smart Fish Kiosks will be used as agro-dealers to channel inputs to farmers by using paper vouchers. In the absence of a detailed grant implementation manual and appropriate internal control arrangements, there may be a high risk of misuse of funds.</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Mitigations:</p> <p>(i) An internal auditor will be hired and trained on IFAD's requirements, financial rules and regulations to review internal control processes.</p> <p>(ii) The internal audits will be performed on a semi-annual basis and reports will be submitted to IFAD. The project management will take all necessary actions to address the findings and the status of audit recommendations will be disclosed in the quarterly interim financial reports.</p> <p>(iii) Development of a comprehensive Project Implementation Manual (PIM), which is including FM Section and a Grant Implementation Manual/Guidelines. The Grant Implementation Guidelines should include a detailed section about the eligibility criteria and a list of required supporting documentation. In addition, DCRD should verify the deliveries and submit a report to the PMU.</p>		
<p>Project Funds Flow/Disbursement Arrangements</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Risk:</p> <p>(i) Lack of sufficient counterpart contributions to pay tax liabilities may lead to liquidity issues and implementation delays. The MoF transfers counterpart funds to MINPERMAR without indicating project level details (e.g. project name, amount), and it is challenging for the project and MINPERMAR to trace how much is distributed for the project. This may lead to delays in MINPERMAR to transfer counterpart contributions to the project account and result liquidity issues.</p> <p>(ii) Continued restrictions and high bureaucracy imposed by national legislation on foreign currency payments may lead to delays in implementation and a high number of request for direct payments from IFAD; This increase the disbursement risk as direct payments to third parties are considered riskier in terms of recovering funds if something goes wrong.</p>	<p>Substantial</p>	<p>Substantial</p>

<p>Mitigations:</p> <p>(i) Timely preparation of the annual budget for counterpart funds and follow up on the release of counterpart funds with the Ministry of Finance (MoF) to ensure that there are sufficient funds to pay project liabilities;</p> <p>(ii) The MoF to transfer Government contributions to the MINPERMAR according to the approved AWPB and demand from the project for payment of taxes and duties and clearly state in the official communications how much of the transferred funds are for AFAP-II, and MINPERMAR to transfer funds to the project's account within 15 days of receiving the funds to avoid delays in implementation.</p> <p>(iii) The MoF will take necessary actions to try to resolve the issues relating to imposed restrictions and the project will use the designated account for payments. Direct payments will be requested only on exceptional cases for high value contracts, which will be subject to IFAD's no objection. Consultancies and services provided by a third party based in the country will not be eligible for direct payments.</p>		
<p>Project Budgeting</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Risk:</p> <p>(i) Insufficient budget monitoring processes and weak control over financing sources during budget preparation may result in failure to absorb allocated funds and achieve targets or overspending on approved categories.</p> <p>(ii) Existence of a parallel currency market with exchange rates above the official exchange rate, which presents a risk of local currency depreciation and budget overruns.</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Mitigations:</p> <p>(i) Timely preparation of AWPBs in line with schedule 2 of the FA and the COSTAB, and submission of the draft Project AWPB to IFAD for comments no later than sixty (60) days before the start of the relevant year and effective budget monitoring.</p> <p>(ii) Prepare the budget taking into account the historical trend of exchange rate fluctuation and inflation level in the country.</p>		
<p>Project Organization and Staffing</p>	<p>Substantial</p>	<p>Moderate</p>
<p>Risk:</p> <p>Risk of delays in the recruitment of key project staff due to difficulties to find experienced and qualified financial management staff, and retaining qualified staff during the implementation period</p>	<p>Substantial</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>(i) FM staff will be hired from open market on a competitive basis and each staff member will complete the IFAD e-learning course at start-up phase. This will be condition for first disbursement.</p> <p>(ii) IFAD will provide an FM training at start-up and there will be continuous capacity building during the implementation period.</p>		
<p>Project Procurement</p>	<p>Substantial</p>	<p>Substantial</p>
<p>A.1 Legal, Regulatory and Policy Framework</p>	<p>Substantial</p>	<p>Substantial</p>

<p>Risk:</p> <p>The procurement legal framework has established the main methods of procurement for goods, services and works, and the conditions for their use.</p> <p>However, the law does not distinguish consulting services from other services and it does not provide selection methods for consulting services. Evaluation of consulting services is therefore subjected to the same procedure as goods and other services. There is a risk that the assessment of quality as the most critical factor for selection of consulting services may not be accorded due regard in the evaluation process.</p> <p>There is no Standard Bidding Document for international competitive bidding as the same document is used for both NCB and ICB.</p> <p>e-procurement has not yet been implemented although the law prescribes rules for the operation and use of electronic platforms by the public contracting entities.</p> <p>The roles and responsibilities of the Procurement Regulatory Agency are well defined but the Agency is not autonomous. There is possible conflict of interest between the functions and powers of SNCP. For example, the role of reviewing and clearing procurement transactions of all Procuring Entities under “power” conflicts with “functions” of regulation, monitoring, and oversight and complaints handling. Procurement is not recognized as a career in the civil service.</p> <p>The internal and external control framework is weak. The Court of Auditor carries out its audits in a yearly cycle as set out in the applicable regulations but due to personnel and resource shortage not every contracting entity is covered each year. Although internal audit should be a continuous process, the IGF lacks resources and capacity in procurement and its reviews are not consistent and systematic. Although the SNCP has a reasonable level of capacity, it conducts few post-reviews for contract entities every year due to resource constraints. There is limited scrutiny of public procurement processes and decisions Civil Society Organizations. This may threaten the integrity of public procurement system and pose a risk to achieving value for money.</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Mitigations:</p> <p>A full set of SBDs should be developed. In the meantime, the Project shall use the IFAD SBDs.</p> <p>Fully automate all procurement processes to increase transparency. Publish all procurement opportunities and contract awards in the Public Procurement Portal in order to centralize and allow free access to public procurement information by all stakeholders. Project to use IFAD OPEN system to process procurement activities.</p> <p>Increase funding to both the Procurement Regulatory Agency and the Court of Auditors to enable them to carry out their functions effectively.</p> <p>In collaboration with relevant stakeholders, SNCP should develop the curriculum for training of procurement cadre and implementing mechanisms for certifying the specialists within contracting authorities responsible for conducting public procurement.</p> <p>Use of the project website to publish procurement opportunities and contract awards to make information available for performance monitoring. Establish contract management plans and systems to implement contracts in line with good procurement practice. Arrange periodic stakeholder/supplier conferences. Periodically update project procurement strategies to identify emerging trends and risk mitigation measures.</p> <p>Ensure the project is audited annually by external independent auditors.</p>		
<p>A.2 Institutional Framework and Management Capacity</p>	<p>Substantial</p>	<p>Substantial</p>

<p>Risk:</p> <p>The roles and responsibilities of the Procurement Regulatory Agency are well defined but the Agency is not autonomous. There is possible conflict of interest between the functions and powers of SNCP. For example, the role of reviewing and clearing procurement transactions of all Procuring Entities under “power” conflicts with “functions” of regulation, monitoring, and oversight and complaints handling. Procurement is not recognized as a career in the Civil Service.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>Increase funding to both the Procurement Regulatory Agency to enable it to carry out its functions effectively.</p> <p>In collaboration with relevant stakeholders, SNCP should develop the curriculum for training of procurement cadre and implementing mechanisms for certifying the specialists within contracting authorities responsible for conducting public procurement.</p>		
<p>A.3 Accountability, Integrity and Transparency of the Public Procurement System</p>	Moderate	Moderate
<p>Risk:</p> <p>Procurement decisions not based on market analysis and risks due to absence of market scoping to determine procurement planning strategy.</p> <p>There are no approval thresholds for contract amendments and information regarding contract awards is limited.</p> <p>The private sector is not adequately sensitized to effectively participate in public procurement opportunities hence impacting competition and value for money.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>Adopt a risk-based approach to procurement planning and develop a project procurement strategy to guide procurement planning.</p> <p>Ensure an effective contract administration and management system. Project to maintain an updated record of all contracts in CMT.</p> <p>Use of the project website to publish procurement opportunities and contract awards to make information available for performance monitoring. Establish contract management plans and systems to implement contracts in line with good procurement practice. Arrange periodic stakeholder/supplier conferences.</p> <p>Periodically update project procurement strategies to identify emerging trends and risk mitigation measures.</p>		
<p>A.4 Public Procurement Operations and Market Practices.</p>	Moderate	Moderate
<p>Risk:</p> <p>The internal and external control framework is weak. The Court of Auditors carries out its audits in a yearly cycle as set out in the applicable regulations but due to personnel and resource shortage not every contracting entity is covered each year. Although internal audit should be a continuous process, the IGF lacks resources and capacity in procurement and its reviews are not consistent and systematic. Although the SNCP has a reasonable level of capacity, it conducts few post-reviews for contract entities every year due to resource constraints. There is limited scrutiny of public procurement processes and decisions Civil Society Organizations. This may threaten the integrity of public procurement system and pose a risk to achieving value for money.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>Ensure the project is audited annually by external independent auditors.</p>		
<p>B.1 Assessment of Project Complexity</p>	Moderate	Moderate

<p>Risk:</p> <p>Project covers a wide catchment area consisting of 5 provinces. Some components of the project involves procurement of works/infrastructure which are complex and require scheduling. The procurement capacity of provincial level structures is weak.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>All procurement for the project will be centralized at the PMU level and the implementation of high value and complex contracts will be closely monitored.</p>		
<p>B.2 Assessment of Implementing Agency Capacity</p>	Substantial	Substantial
<p>Risk:</p> <p>The IA has the necessary facilities to carry out the expected procurement activities for the Project, but the staff lack adequate qualifications and skills in procurement.</p> <p>A high proportion of contracts for the IA are procured using Direct Procurement method. Only a small percentage of competitions and contracts integrate sustainable procurement considerations.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>The staff should be encouraged to enroll for the IFAD BUILDPROC course. Extra support to be provided especially in orientation of the staff on IFAD procurement procedures.</p> <p>Project to limit use of DC/SSS to situations as this is a highly regulated selection method.</p> <p>Project to incorporate sustainable criteria in bidding documents and contract documents.</p>		
<p>Project Procurement Overall</p>	Substantial	Substantial
<p>Risk:</p> <p>There are no SBD's for use in ICB and consulting services. The law does not distinguish consulting services from other services. There is a risk that quality does not take precedence in the procurement and evaluation of consulting services.</p> <p>There is no end-to-end procurement system.</p> <p>The Procurement Regulatory Agency lacks autonomy and there is possible conflict of interest between its the functions and powers. Procurement is not recognized as a career in the civil service. The internal and external control framework is weak which may jeopardize achieving value for money.</p> <p>There is limited scrutiny of public procurement processes and decisions by citizens and Civil Society Organizations. This may threaten the integrity of public procurement system and pose a risk to achieving value for money.</p> <p>The project does not have a PPS. The IA does not have a contract management system in place and contract files have gaps.</p>	Substantial	Substantial

<p>Mitigations:</p> <p>A full set of SBDs should be developed. In the meantime, the Project shall use the IFAD SBDs.</p> <p>Project to use IFAD OPEN system to process procurement activities.</p> <p>Increase funding to both the Procurement Regulatory Agency and the Court of Auditors to enable them to carry out their functions effectively.</p> <p>In collaboration with relevant stakeholders, SNCP should develop the curriculum for training and certification of procurement cadre.</p> <p>Use of the project website to publish procurement opportunities and contract awards to make information available for performance monitoring.</p> <p>Fully automate all procurement processes to increase transparency. Publish all procurement opportunities and contract awards in the Project's website and Public Procurement Portal in order to centralize and allow free access to public procurement information by all stakeholders. Project to use IFAD OPEN system to process procurement activities.</p> <p>Increase funding to both the Procurement Regulatory Agency and the Court of Auditors to enable them to carry out their functions effectively.</p> <p>In collaboration with relevant stakeholders, SNCP should develop the curriculum for training of procurement cadre and implementing mechanisms for certifying the specialists within contracting authorities responsible for conducting public procurement.</p> <p>Use of the project website to publish procurement opportunities and contract awards to make information available for performance monitoring. Establish contract management plans and systems to implement contracts in line with good procurement practice. Arrange periodic stakeholder/supplier conferences. Periodically update project procurement strategies to identify emerging trends and risk mitigation measures.</p> <p>Ensure the project is audited annually by external independent auditors.</p> <p>The IA should establish a document management system to ensure that all the recommended documents including correspondence are properly maintained.</p>		
Environment, Social and Climate Impact	Moderate	Low
Vulnerability of target populations and ecosystems to climate variability and hazards	Moderate	Moderate
<p>Risk:</p> <p>Aquaculture ponds or construction may damage soil, flora, fauna, and ecosystem services, which could upset the ecological balance, especially in aquaparks. Deforestation, overgrazing, bush fires, and soil erosion will increase target populations' livelihoods, ecosystems, economic assets, and infrastructure's exposure to climate variability and hazards, defeating the Project's purpose and DO.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>The Project will analyse and minimise negative impacts through: a) an Environmental and Social Management Plan (ESCMP); and b) a Monitoring Plan covering both public health and environmental management. The impacts of climatic shocks will be reduced by integrating the effects of climate change into the planning and design of ponds and infrastructure. In addition, several measures will be implemented to reduce the vulnerability of target populations. These include revegetation and reforestation.</p>		
Greenhouse Gas Emissions	Moderate	Moderate

<p>Risk:</p> <p>Risk: a) The production of feed for farmed fish often relies on agriculture, including the cultivation of crops like soybean, maize, and fishmeal. The manufacturing and transportation of feed ingredients contribute to GHG emissions, particularly if unsustainable practices are used; b) Aquaculture facilities require energy for various purposes, such as maintaining water quality, providing aeration, and running pumps. Energy sources like fossil fuels can lead to direct emissions of carbon dioxide (CO₂) and other GHGs; c) Anaerobic decomposition of organic matter in aquaculture ponds can result in the release of methane (CH₄), a potent GHG. This can occur when organic material, such as uneaten feed and feces, accumulates at the bottom of ponds. d) Converting natural habitats, such as wetlands, into aquaculture farms can release significant amounts of stored carbon and other GHGs. It also leads to the loss of valuable carbon sinks; e) Improper handling and disposal of aquaculture waste can lead to GHG emissions, especially if organic matter breaks down in anoxic conditions, producing methane; f) Excessive nutrient runoff from aquaculture operations can cause eutrophication, leading to increased GHG emissions, particularly nitrous oxide (N₂O), a potent GHG; g) The application of chemicals such as antibiotics and pesticides in aquaculture can lead to indirect GHG emissions, such as through the production and transportation of these substances.</p>	Moderate	Moderate
<p>Mitigations:</p> <p>a) Adopting sustainable feed options and feed management practices to reduce reliance on wild-caught fishmeal and unsustainable feed ingredients; b) Improving energy efficiency in aquaculture operations, such as using renewable energy sources and optimizing equipment; c) Implementing waste management strategies to minimize organic matter accumulation and methane production in ponds; d) Promoting responsible land use and avoiding conversion of carbon-rich ecosystems for aquaculture expansion; and e) Enhancing water quality management to reduce nutrient runoff and subsequent GHG emissions</p>		
<p>Physical and Economic Resettlement</p>	Moderate	Low
<p>Risk:</p> <p>No physical and economic resettlement foreseen.</p>	Moderate	Low
<p>Mitigations:</p> <p>Not Applicable.</p>		
<p>Community health, safety and security</p>	Moderate	Low
<p>Risk:</p> <p>Risk: Angola is vulnerable to outbreaks of malaria, cholera, zika. Communicable diseases account for 50% of recorded mortality. Malaria is a public health concern, and a major cause for morbidity, mortality and loss of production. More than half the population has inappropriate latrines; almost a third of the population practice open defecation. Three quarters of the population in rural areas lack safe drinking water sources. The high level of malnutrition is a concern.</p>	Moderate	Low
<p>Mitigations:</p> <p>AFAP-2 will promote nutrition sensitive aquaculture accompanied by targeted social behaviour change communication, support supply of safe drinking water and sanitation facilities in collaboration with sector relevant partners.</p>		
<p>Labour and Working Conditions</p>	Moderate	Low
<p>Risk:</p> <p>Young men and women have been forced to migrate to urban areas in search of better opportunities, due to climate shocks. The elderly, child-headed households and people living with HIV/AIDS that are dependent on such labour have become more vulnerable to climate change and drought impacts.</p>	Moderate	Low

<p>Mitigations:</p> <p>AFAP-2 will act as an incentive for the young men and women to return to the villages and engage in project activities to increase their incomes, food and nutrition security. There will be creation of employment through the construction of infrastructure and employment in the fish value chain.</p>		
<p>Indigenous People</p>	Low	Low
<p>Risk:</p> <p>There is low risk that AFAP-2 will be sited in areas where indigenous peoples are present or on lands and territories claimed by indigenous people. The risk that the project will lead to impacts on the cultural heritage of indigenous peoples is low. There is low risk that AFAP-2 may cause physical, social, or economic impacts on indigenous peoples, or in threats to or the loss of resources of historical or cultural significance to them</p>	Low	Low
<p>Mitigations:</p> <p>Based on AFAP-2's geographical focus, it is not likely that indigenous people or their areas will be affected. In any case, the targeting strategy will ensure to do no harm to any peoples and their properties.</p>		
<p>Cultural Heritage</p>	Moderate	Low
<p>Risk:</p> <p>There is a very low risk that AFAP-2 will be implemented in areas of cultural heritage sites where it could cause loss of resources of historical, religious or cultural significance and where it could lead to flooding when fish ponds are constructed. The risk that women may be prevented from participating due to patriarchal norms is also low, as the project will sensitise communities on the benefits of women participation.</p>	Moderate	Low
<p>Mitigations:</p> <p>The targeting strategy will ensure that AFAP-2 will not target cultural heritage sites for its interventions and will avoid areas vulnerable to flooding during pond site construction. The strategy will also ensure that women are directly involved in project activities and to benefit from participation. The M&E system will collect gender and age disaggregated data to monitor the performance of the targeting strategy.</p>		
<p>Resource Efficiency and Pollution Prevention</p>	Moderate	Moderate
<p>Risk:</p> <p>a) Excessive use of feed and fertilizers in aquaculture ponds can lead to nutrient enrichment in the water. This can cause eutrophication, where algal blooms deplete oxygen levels, leading to fish kills and other adverse impacts on aquatic ecosystems; b) Aquaculture facilities may release effluents containing uneaten feed, feces, and other organic matter into surrounding water bodies. These discharges can degrade water quality, affecting the health of wild fish and other aquatic organisms; c) The use of antibiotics, pesticides, and other chemicals in aquaculture can lead to water contamination. These substances can harm non-target species, contribute to the development of antibiotic resistance, and pose risks to human health when consumed; d) Conversion of natural habitats, such as wetlands, into aquaculture farms can lead to habitat destruction and loss of critical ecosystem services; e) High stocking densities and poor water quality in aquaculture facilities can promote the spread of diseases among farmed fish. If not properly managed, these diseases can spread to wild fish populations; f) GHG emissions from aquaculture activities contribute to climate change, which in turn affects marine and freshwater ecosystems, exacerbating the risks of pollution and other impacts; and g) a situation where some deserving community members may not be able to participate in the project because they may not have the land due to competing use for land .</p>	Moderate	Moderate

<p>Mitigations:</p> <p>a) Implementing proper waste management and effluent treatment systems to minimize nutrient pollution and water quality degradation; b) Promoting responsible and reduced use of chemicals, such as antibiotics and pesticides, through disease prevention and integrated pest management practices. c) Ensuring proper site selection to avoid habitat destruction and minimize the risk of disease transmission to wild fish. Monitoring and regulating the introduction of exotic species to prevent genetic pollution and biodiversity loss. d) Encouraging the use of eco-friendly and low-impact feed ingredients to reduce nutrient pollution and reliance on wild-caught fishmeal; e) emphasizing proper farm management practices to reduce environmental impacts and improve the sustainability of aquaculture operations; and f) project will facilitate the process of identification and leasing of communal land for use by those deserving community members that may not be able to participate in the project because they may not have the land due to competing use.</p>		
<p>Biodiversity Conservation</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Risk:</p> <p>a) Introducing non-native species or strains into local environments can lead to genetic interactions with native populations. Hybridization and genetic introgression can dilute the genetic integrity of wild populations, potentially reducing their fitness and adaptive capabilities; b) High stocking densities and the concentration of farmed fish in aquaculture facilities can increase the risk of disease outbreaks. If pathogens from aquaculture operations spread to wild fish populations, it can lead to the decline of native species and disrupt local biodiversity; c) Converting natural habitats, such as wetlands, into aquaculture farms can result in the loss of critical ecosystems that support a wide range of species. Habitat conversion reduces biodiversity and can lead to the displacement or loss of local fauna and flora; d) The use of chemicals, such as antibiotics, pesticides, and disinfectants in aquaculture can have unintended effects on non-target species in the surrounding environment, impacting biodiversity; e) Aquaculture operations can generate excess nutrients and organic matter, leading to eutrophication and changes in water quality.</p>	<p>Moderate</p>	<p>Moderate</p>
<p>Mitigations:</p> <p>a) Adopting proper containment and escape prevention measures to reduce the risk of farmed species escaping into the wild; b) Implementing disease prevention and biosecurity measures to minimize the risk of disease transmission between aquaculture facilities and wild populations. c) Practicing responsible site selection to avoid the conversion of critical habitats and to protect local biodiversity; d) Reducing the use of chemicals in aquaculture through disease prevention, integrated pest management, and sustainable practices; e) Ensuring responsible sourcing of feed ingredients to minimize the impact on wild fisheries and habitats; f) Monitoring water quality and implementing proper waste management to mitigate eutrophication and its impacts on biodiversity.</p>		
<p>Stakeholders</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Stakeholder Grievances</p>	<p>Substantial</p>	<p>Substantial</p>
<p>Risk:</p> <p>Due to limited knowledge and experience among consultants, project staff, and senior government representatives from lead project executing agencies on how to set up and operate grievance redress mechanisms, grievance/complaint redress processes (including those related to allegations of non-compliance with IFAD's E,S,C standards, fraud, corruption, or SEA) may be inefficient, leading to unaddressed stakeholder complaints.</p>	<p>Substantial</p>	<p>Substantial</p>

<p>Mitigations:</p> <p>The high-level implementation plan of IFAD's Framework for Operational Feedback from Stakeholders will train, Project staff, and senior government representatives from lead project executing agency to implement improved practices to improve stakeholder engagement and feedback in IFAD-supported operations. Special attention will be given to how to set up functional grievance redress processes that are socially inclusive and allow Project target groups to voice complaints or report wrongdoing and facilitate timely resolution of potential or realised negative impacts arising from Project design and implementation.</p>		
<p>Risk:</p> <p>Due to limited awareness and accessibility of targeted groups to project, government, and IFAD whistle-blower protection measures and confidential reporting channels (especially in contexts where societal norms may discourage reporting of complaints for fear of retribution or retaliation), allegations of fraud and corruption, sexual exploitation, and abuse may not be received.</p>	Substantial	Substantial
<p>Mitigations:</p> <p>Capacity building on inclusive and accessible grievance redress systems will focus on the following two elements: a) information about such mechanisms should be readily available to all stakeholders, with special attention to raising the level of understanding of more vulnerable segments of communities served, e.g. by providing clear and understandable information on how to channel grievances, and processes and timelines for handling and responding to grievances submitted; and b) information regarding whistle-blower protection measures, and confidentiality.</p>		
<p>Stakeholder Engagement/Coordination</p>	Moderate	Moderate
<p>Risk:</p> <p>Due to relatively weak coordination and harmonisation mechanisms among Government departments and development partners in the country, there is a risk of some duplication and/or inconsistency of approaches, resulting in less buy-in from stakeholders (e.g., government, project target groups, civil society).</p>	Moderate	Moderate
<p>Mitigations:</p> <p>IFAD should actively collaborate with development partners in the country on possible areas of interest.</p>		
<p>Risk:</p> <p>AFAP-2 may not identify relevant stakeholders or provide adequate information disclosure, consultation/coordination with, and stakeholder buy-in on project objectives, resulting in stakeholder misunderstandings or opposition that may undermine project implementation and development objectives</p>	Moderate	Moderate
<p>Mitigations:</p> <p>Building on its successful relationship with diverse development partners in the agriculture sector in Angola and utilising its national office will guarantee coordination and harmonisation to promote complementarities and synergies with other investments. IFAD's new Framework for Operational Feedback from Stakeholders will encourage proactive stakeholder involvement and feedback, improving project relevance, ownership, impact, and sustainability.</p>		

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 Project Design Report

Annex 10: Exit Strategy

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Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

Annex 10: Exit Strategy

Presented hereunder is a summary of activities to be used to build the sustainability of the AFAP-2 results and benefits. The AFAP-2 exit strategy is inbuilt at different levels: a) community-led development; b) implementation approach; c) market linkages; and d) establishment of infrastructure committees.

- *Community-led Development* – AFAP-2 target beneficiary communities are to be empowered and facilitated to be in charge of Project planning, implementation, and evaluation. This approach will not only increase the level of community ownership of the intervention, it will also enhance the feeling of shared responsibility within the community there by contributing to improved effectiveness of the Project. The Community-Based Organisations (CBOs), such as the CCPs, Producer Groups, etc., will be promoters and managers of socio-economic change and will be capacitated to plan, implement and operate subprojects. In addition, the capacities of CBOs, Producer Groups, other institutions will be improved and this will contribute a smooth exit after completion of AFAP-2 activity implementation;
- *Implementation Approach* – The AFAP-2 implementation approach is such that the Project will be fully embedded into government structures at the national and, especially, provincial levels. Through consultation of the target communities, these government structures, working through their frontline extension agents, will be involved in AWPB preparation activities, overseeing activity implementation and in monitoring implementation progress. Under Subcomponent 3.1, capacities of the respective government institutions will be variously strengthened to ensure effectiveness. All these government institutions will continue to exist long after AFAP-2 activity completion;
- *Market Linkage* – Market linkage and business orientation are a key consideration of AFAP-2. As long as the relationships established between the fisherfolks/farmers and off-takers prove to be mutually beneficial, they will form a basis for sustainability and exit of the Project. Supporting and mentoring the youth with regard to the Smart Fish Kiosks, both technically and financially, will also be a key AFAP-2 sustainability measure;
- *Establishment of Infrastructure Committees* – AFAP-2 will be putting in place a number of infrastructure. For the operation, maintenance and management of all the different infrastructure to be supported by AFAP-2, community constituted committees will be put in place and their capacities built variously for continuity after AFAP-2 closure. Particular emphasis will be put on ensuring that representatives of all interest groups are part of the different committees.

Angola

Artisanal Fisheries and Aquaculture Project Phase 2

Project Design Report

Annex 11: Mainstreaming themes – Eligibility criteria checklist

Mission Dates: 27/11/2023 - 10/01/2024

Document Date: 29/07/2024

Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

Mainstreaming themes – Eligibility criteria checklist						
	<input type="checkbox"/> Be gender transformative	<input checked="" type="checkbox"/> Be youth sensitive	<input checked="" type="checkbox"/> Be nutrition sensitive	<input type="checkbox"/> Prioritize persons with disabilities	<input type="checkbox"/> Prioritize indigenous peoples	<input checked="" type="checkbox"/> Include climate finance <input checked="" type="checkbox"/> Build adaptive capacity
Situation analysis	<input type="checkbox"/> National gender policies, strategies and actors <input type="checkbox"/> Gender roles and exclusion/discrimination <input type="checkbox"/> Key livelihood problems and opportunities, by gender	<input checked="" type="checkbox"/> National youth policies, strategies and actors <input checked="" type="checkbox"/> Main youth groups <input checked="" type="checkbox"/> Challenges and opportunities by youth group	<input checked="" type="checkbox"/> National nutrition policies, strategies and actors <input checked="" type="checkbox"/> Key nutrition problems and underlying causes, by group <input checked="" type="checkbox"/> Nutritionally vulnerable beneficiaries, by group	<input type="checkbox"/> National policies, strategies and actors <input type="checkbox"/> Main groupings among PwDs <input type="checkbox"/> Context-based barriers and opportunities for PwDs	<input type="checkbox"/> International standards, national policies, strategies and key IPs' organizations <input type="checkbox"/> Main IPs communities, demographic, social, cultural and political characteristics <input type="checkbox"/> Important livelihoods constraints and opportunities for IPs and their cultural heritage	
Theory of change	<input type="checkbox"/> Gender policy objectives (empowerment, voice, workload) <input type="checkbox"/> Gender transformative pathways <input type="checkbox"/> Policy engagement on GEWE	<input checked="" type="checkbox"/> Pathways to youth socioeconomic empowerment <input checked="" type="checkbox"/> Youth employment included in project objectives/activities	<input checked="" type="checkbox"/> Nutrition pathways <input checked="" type="checkbox"/> Causal linkage between problems, outcomes and impacts	<input type="checkbox"/> Pathways to PwDs' socioeconomic empowerment using a twin-track approach	<input type="checkbox"/> Pathways to IPs' socioeconomic empowerment	
Logframe indicators	<input type="checkbox"/> Outreach disaggregated by sex, youth and IPs (if appropriate) <input type="checkbox"/> Women are > 40% of outreach beneficiaries <input type="checkbox"/> IFAD empowerment index (IE.2.1)	<input checked="" type="checkbox"/> Outreach disaggregated by sex, youth and IPs (if appropriate) <input checked="" type="checkbox"/> Persons with new jobs/employment opportunities (CI 2.2.1)	<input checked="" type="checkbox"/> Outreach disaggregated by sex, youth and IPs (if appropriate) <input checked="" type="checkbox"/> Targeted support to improve nutrition (CI 1.1.8) Outcome level CIs <input type="checkbox"/> CI 1.2.8 MDDW <input checked="" type="checkbox"/> CI 1.2.9 KAP	<input type="checkbox"/> Outreach disaggregated by sex, youth, disability and IPs (if appropriate)	<input type="checkbox"/> Outreach indicator disaggregated by sex, youth and IPs <input type="checkbox"/> IPs are > 30% of target beneficiaries	
Human and financial resources	<input type="checkbox"/> Staff with gender TORs <input type="checkbox"/> Funds for gender activities <input type="checkbox"/> Funds for IFAD empowerment index in M&E budget	<input checked="" type="checkbox"/> Staff with youth TORs <input checked="" type="checkbox"/> Funds for youth activities	<input checked="" type="checkbox"/> Staff or partner with nutrition TORs <input checked="" type="checkbox"/> Funds for nutrition activities	<input type="checkbox"/> Staff with disability inclusion-specific TORs <input type="checkbox"/> Funds for disability inclusion-related activities (including accessibility)	<input type="checkbox"/> Staff with IPs-specific TORs <input type="checkbox"/> Funds for IPs related activities, including FPIC	IFAD Adaptation Finance \$35,853,000 IFAD Mitigation Finance \$0 Total IFAD Climate-focused Finance \$35,853,000

ECG Remarks	Gender Nutrition Youth Persons with Disabilities Indigenous Peoples <input type="checkbox"/> No social inclusion themes
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Angola

Artisanal Fisheries and Aquaculture Project Phase 2

Project Design Report

Annex: Financial Management Arrangements In The Pdr Post Drr

Mission Dates: 27/11/2023 - 10/01/2024

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Programme Management Department

Annex 7: Financial Management Arrangements

Template for Detailed FM arrangements in the Project Design Report (PDR)

I. Summary of Financial Management arrangements

A Financial Management assessment (FMA) of AFAP-II has been performed as part of the project design in accordance with IFAD's guidelines. The objective of the FMA is to provide reasonable assurance that the project will be implemented in an environment with a sufficient financial management systems and controls. The FMA involved assessing the inherent risk at country, entity and project level.

Overall FM inherent and residual risk is rated as substantial. Main financial management risks and proposed mitigation measures are detailed in the Table 2.

II. Project financial profile

The total cost for AFAP-2 is estimated at US\$90 million over a 7-year period. IFAD's contribution is estimated at US\$57.78 million (or 64 percent) of the total project cost. This comprises: a) about US\$42.78 million (47.5 percent) from IFAD-12 financing cycle; and b) US\$15 million (17 percent) from BRAM of the IFAD-12. GoA's contribution is estimated at US\$9.2 million (10.2 percent), which is including cash contribution of US\$6.44 million for payment of taxes and duties, and in-kind contribution of US\$2.78 million for recurrent costs, beneficiaries are expected to contribute in-kind contribution in the amount of US\$4.96 million (5.5 percent) for equipment, material, goods and services, the EU is expected to provide US\$10 million (11.1 percent) co-financing and the private sector will contribute US\$8.04 million (9 percent).

AFAP-II project categories will include; Training and workshop; equipment, material, goods and services; Operating costs; Salaries and Allowances; Consultancies; Works; Vehicles; Grants and Subsidies; and credit and guarantee funds, which will be fully financed by private sector. Activities relating to grants, training and workshops are riskier in terms of their nature and due to higher risk of misuse of funds, therefore, appropriate internal control arrangements should be put in place to ensure that funds are used for intended purposes.

The overall recurrent cost is estimated at 18% of the total project cost. However, the recurrent cost under IFAD financing represents 19% of IFAD financing, which is higher than IFAD's threshold of 15%. High level of recurrent costs are due to the high cost of living in Angola and decentralized project structure, and cannot be avoided, but the recurrent costs should be closely monitored during the design.

The first phase of AFAP has experienced slow start-up. To facilitate a prompt start-up, a withdrawal up to USD 500 000 may be made from the IFAD Loan to pay for expenditures related to the Project start-up before fulfilment of the conditions precedent to withdrawal. The start-up activities will include (i) recruitment of key staff; (ii) finalizing the Project Implementation Manual; (iii) finalization of the first AWPB & procurement plan; (iv) organization of a Start-up workshop; (v) procurement of the accounting software; (vi) finalization of the Agreement/ contract templates with the Service Providers; and (vii) finalization of Investment/grant Guidelines, baseline survey and mapping of beneficiaries and templates. Start-up costs must be accounted for and included in the first set of aggregate financial statements.

III. Implementation Arrangements

The implementation and management structure of AFAP-2 will largely follow AFAP management arrangements with some modifications. AFAP-2 will be implemented through GoA's existing structures. The Ministry of Fisheries and Marine Resources (MINPERMAR) will be the Project's lead implementing agency and Institute for the Development of Artisanal Fisheries and Aquaculture (IPA) will have the responsibility of overseeing the Project's implementation. IPA will delegate the day-to-day management of the Project to a Project Management Unit (PMU) that will be located in Cuanza Norte, one of the five participant provinces. Unlike the AFAP implementation arrangements, AFAP-2 embraces a more decentralized approach with the Provincial structures actively engaged in project implementation, including preparation of work plans and budgets, implementation of field activities and provincial-level progress reporting. The oversight function a Project Steering Committee (PSC) will be established at the national level and chaired by the MINPERMAR Minister.

At the Provincial level, AFAP-2 implementation will be coordinated by the IPA representatives who serve as province coordinators. FM and procurement functions will be managed by the PMU located in Cuanza Norte. At province level, there will be only small petty cash expenditures, which will be maintained and reported back to the PMU by office assistants. At the provincial level, a Provincial Project Steering Committee (PPSC) will be established in each participating province.

IV. Financial Management Risk Assessment

A. Inherent risks assessment pillars

a. Country level

The Transparency International Corruption Perception Index for Angola scored 33, which places the country in the 116th position out of 180 surveyed countries, moving the country from High Risk to Substantial Risk. (Score change, +4 since 2021). Most recent PEFA assessments were in 2016 and 2022. However, both PEFA reports are yet to be approved and they are not publically available. In accordance with the World Bank's Strengthening Governance for Enhanced Service Delivery Project Appraisal Document dated November 2022, efforts have been made to improve PFM practices at the local level, but weaknesses remain. The public financial management (PFM) capacity is still weak in many municipalities, given the centralized nature of the PFM system in Angola.

In addition, 2022 IMF Article IV Consultation press release indicated that there is need to further reduce corruption, make further progress on strengthening governance and government transparency. Improvements in PFM needed in the areas of budget execution, annual financial reports, annual audit, internal controls/audit, transparency and the asset management.

b. Entity level

MINPERMAR and IPA have experience in implementing IFAD funded projects as they implemented 1st phase of AFAP. However, IPA will establish a new Project Management Unit (PMU) and possible delays are expected in terms of recruitment of qualified and experienced FM staff. Newly required FM staff may not have the relevant knowledge about IFAD's financial management procedures and possible delays in capacity building may negatively effect the project implementation.

c. Project level

Overall Project FM inherent and residual risk is rated as substantial. Main financial management risks and proposed mitigation measures are detailed in the Table 2. The main risks identified during the FM assessment and lessons learned from AFAP include delay in receiving counterpart contributions to pay tax liabilities that may lead to liquidity issues and in some cases may result cross financings and implementation delays; restrictions and high bureaucracy on foreign currency payments that are imposed by national legislation, which may lead to implementation delays or high number of direct payment requests from IFAD and a lack of an internal audit function. The project also includes high amount of allocations for grants, therefore the project implementation manual (PIM) should have a detailed section about eligibility criteria, selection/approval processes and required supporting documentations about these activities and the project should strictly comply with the arrangements detailed in the PIM.

B. Project Control Risks

Table 2. Summary of FM Risks and mitigating actions

Summary	Brief description of issues	Inherent Risk at design H/S/M/L	Agreed Mitigation Measures (covenants precedent to disbursement)	Residual Risk H/S/M/L
A. Inherent risk assessment pillars				
i. Country level	Weak PFM systems, including internal controls, annual audit, budget execution and oversight on project activities.	S	Improvements in PFM systems in the areas of budget execution, annual financial reports, annual audit, internal controls/audit, transparency and the asset management.	S
ii. Entity level	IPA will establish a new PMU and possible delays are expected in terms of recruitment of qualified and experienced FM staff. Newly required FM staff may not have the relevant knowledge about IFAD's financial management procedures and possible delays in capacity building may negatively effect the project implementation.	S		S
iii. Project level	Activities relating to grants, training and workshops are riskier in terms their nature and due to higher risk of misuse of funds.	S	Appropriate internal control arrangements should be put in place to ensure that funds are used for intended purposes. The PIM should have a detailed section about eligibility criteria, selection/approval processes and required supporting documentations about these activities and the project should strictly comply with the	S

			arrangements detailed in the PIM. Internal audit focus should be on high-risk activities.	
B. Control risk assessment pillars				
1. Organization and Staffing	Delays in the recruitment of key project staff due to difficulties to find experienced and qualified financial management staff, and retaining qualified staff during the implementation period.	S	(i) Experienced and qualified FM staff will be hired from open market on a competitive basis and each staff member will complete the IFAD e-learning course within 3 months of date of appointment. This will be condition for first disbursement. Recruitment of the staff will be done based on Financial Management Staff ToRs included in the PIM and will be subject to IFAD's no objection. There will be annual performance evaluations to ensure that personnel capacity is kept at an acceptable level and extension of contracts will be based on successful performance rating. (ii) IFAD will provide an FM training at start-up and there will be continuous capacity building during the implementation period.	M
2. Budgeting	(i) Insufficient budget monitoring processes and weak control over financing sources during budget preparation may result in failure to absorb allocated funds and achieve targets or overspending on approved categories. (ii) Existence of a parallel currency market with exchange rates above the official exchange rate, which presents a risk of local currency depreciation and budget overruns.	S	(i) Timely preparation of AWPBs in line with schedule 2 of the FA and the COSTAB, and submission of the draft Project AWPB to IFAD for comments no later than sixty (60) days before the start of the relevant year and effective budget monitoring. The budget monitoring will be done in the accounting software and actual vs budget reports will be submitted to the management at least on a quarterly basis to ensure that all bottlenecks that are causing implementation delays are addressed. (ii) Prepare the budget taking into account the historical trend of exchange rate fluctuation and inflation level in the country.	S
3. Funds flow and Disbursement Arrangements	(i) Lack of sufficient counterpart contributions to pay tax liabilities may lead to liquidity issues and implementation delays. The MoF transfers counterpart funds to	S	(i) Timely preparation of the annual budget for counterpart funds and follow up on the release of counterpart funds with the Ministry of Finance (MoF) to	S

	<p>MINPERMAR without indicating project level details (e.g. project name, amount), and it is challenging for the project and MINPERMAR to trace how much is distributed for the project. This may lead to delays in MINPERMAR to transfer counterpart contributions to the project account and result liquidity issues.</p> <p>(ii)Continued restrictions and high bureaucracy imposed by national legislation on foreign currency payments may lead to delays in implementation and a high number of request for direct payments from IFAD; This increase the disbursement risk as direct payments to third parties are considered riskier in terms of recovering funds if something goes wrong.</p>	<p>ensure that there are sufficient funds to pay project liabilities;</p> <p>(ii)The MoF to transfer Government contributions to the MINPERMAR according to the approved AWPB and demand from the project for payment of taxes and duties and clearly state in the official communications how much of the transferred funds are for AFAP-II, and MINPERMAR to transfer funds to the project's account within 15 days of receiving the funds to avoid delays in implementation.</p> <p>(iii) As agreed with the MoF, the MoF will take necessary actions to resolve the issues relating to imposed restrictions and the project will use the designated account for payments. Direct payments will be requested only on exceptional cases for high value contracts, which will be subject to IFAD's no objection. Consultancies and services provided by a third party based in the country will not be eligible for direct payments.</p>	
<p>4. Internal Controls</p>	<p>(i)Lack of an internal audit function to determine compliance with internal control provisions, rules and regulations.</p> <p>(ii)Risk of funds not being used for intended purposes, including municipality and province level.</p> <p>(iii)Grants allocated under sub-component 2.1 will be implemented in collaboration with INAPEM and DCRD. Smart kiosks will be used as agro-dealers to channel inputs to farmers by using paper vouchers. In the absence of a detailed grant implementation manual and appropriate internal control arrangements, there may be a high risk of misuse of funds.</p>	<p>S</p> <p>(i)An internal auditor will be hired and trained on IFAD's requirements, financial rules and regulations to review internal control processes.</p> <p>(ii) The internal audits will be performed on a semi-annual basis and reports will be submitted to IFAD. The project management will take all necessary actions to address the findings and the status of audit recommendations will be disclosed in the quarterly interim financial reports.</p> <p>(iii)Development of a comprehensive Project Implementation Manual (PIM), which is including FM Section and a Grant Implementation Manual/Guidelines. The Grant Implementation Guidelines should include a detailed section about the eligibility criteria and a list of required supporting</p>	<p>S</p>

			documentation. In addition, DCRD should verify the deliveries and submit a report to the PMU.	
5. Accounting and Financial Reporting	<p>(i) SIGFE, the government accounting software is not able to generate financial reports as per the project activities and IFAD requirements.</p> <p>(ii) The PRIMAVERA Accounting Software used in AFAP-I was very basic, with no budget, procurement, or fixed asset modules and part of the accounting and reporting was done manually by exporting data to Microsoft Excel, which was prone to errors.</p> <p>(iii) Risk of delays in submission of quarterly IFRs and unaudited financial statements.</p> <p>(iv) Possible collaboration with FAO and WFP is foreseen at design. In case of collaboration, there is a risk that financial management requirements including financial reporting may not be in compliance with IFAD requirements.</p>	S	<p>(i) Procurement of a new accounting software that will be able to record and report information as per IFAD's requirements. Preferably, ERP system (PHC), which is also used by on-going IFAD projects. The accounting software will include a budget, procurement, and enhanced financial reporting module, which is capable of generating IFRs as per IFAD requirements. IFRs format will be agreed with IFAD. The procurement of the software will be condition for first disbursement.</p> <p>(ii) Project's annual financial statements will be submitted to IFAD within four months after the financial year-end and the quarterly IFRs will be submitted to IFAD within 30 days after the quarter end.</p> <p>(iii) In case of collaboration with a UN Agency, all FM rules that applies to the Borrower shall also be included in the project agreement signed between the Government and the UN Agency.</p>	M
6. External Audit	<p>(i) Lack of risk-based approach in PFM systems. Lack of information to verify the scope and methodology of audits carried out by the Court of Accounts (SAI) or the capacity of the Court of Accounts.</p> <p>(ii) Risk of late submission of external audit submissions and delays in implementation of audit recommendations. In addition, scope of the audit may not effectively cover higher risk activities and UN Agencies.</p>	S	<p>(i) The project's financial statements will be audited by an independent audit firm acceptable to IFAD in accordance with international auditing standards.</p> <p>(ii) Early engagement of the external audit firm to avoid late audit submissions and audit TORs to be cleared by IFAD. A well-defined audit scope that targets the specific areas where risks are most likely to be present. It also ensures the audit is efficient and pinpointing where attention is needed most.</p> <p>(iii) If UN Agency's internal rules and regulations do not allow project level annual audits, alternative assurance mechanism may be adopted, such as a management assertion letter,</p>	S

			which will be signed by the Director of Finance/Treasurer of the UN Agency.	
			(iv) Submission of audit reports and the management letter within 6 months after the end of each financial year.	
Overall FM Risk @ design¹		S		S

V. Financial Management and Disbursement Arrangements

a. Financial management organization and staffing

In line with this decentralized approach, the PMU will be located in Cuanza Norte, one of the five participating provinces. Financial Management (FM) functions will be performed by an experienced FM Officer and an Accountant located in the PMU. There will also be an internal auditor who will be reporting to the Project Steering Committee. FM and the internal audit staff will be hired from the open market on a competitive basis within 2 months of entry into force. The project's financial management will be in accordance with IFAD policies, procedures and guidelines, which will be explained during the start-up phase and continuous capacity building will be provided during the implementation. In addition, there will be annual performance evaluations.

b. Budgeting

Donor funded projects are not included in the national budget. The Government has integrated a Financial Management Information System (SIGFE) and the SIGFE can now accommodate 50% of the national budget, but the donor funds are still managed outside SIGFE. More effort is needed in budget credibility and execution. There are significant variances between planned budget and actual expenditures. AFAP-II annual budget will be prepared in sufficient detail with IFAD templates and submitted to IFAD for no objection sixty days (60) prior to the end of each fiscal year. Financial and physical progress against approved budgets (AWPB) and commitments will be monitored monthly by various components, sub-components and expenditure categories.

c. Disbursement Arrangements and Flow of Funds

IFAD funds will be disbursed through separate designated accounts opened in denominated currency for each financing instrument in a commercial bank acceptable to IFAD. The project will open segregated operating accounts for each financing instrument in Angolan Kwanza (AOA) to make payments for eligible expenditures through these accounts. Transfer of resources to the provinces for project implementation will be made available from the operating account to the provincial accounts.

The borrower will also open and maintain a designated account in EUR to receive funds from EU funding. In addition, there will be an operating account opened in local currency in a commercial bank specifically for EU funds. All payments for EU-eligible expenditures will be made from these bank accounts.

¹The Final Risk at design should reflect a combined consideration of inherent and control risks for the project.

The project will maintain an operating account in Angolan Kwanza (AOA) to receive counterpart funds from the Government for payment of taxes and duties for the implementation of the project.

Disbursements will be based on the submission of quarterly Interim Financial Reports and the following disbursement procedures will be used: a) reimbursements; b) advances; and c) direct payments, which will be allowed only in exceptional cases, subject to IFAD's approval.

d. Internal Controls and Internal audit arrangements

The Court of Accounts (SAI) is responsible for performing internal audits. However, there is no information about the SAI's methodology, the scope of the audit, or their capacity, as this information is not available. Additionally, there is no internal audit unit in the MINPERMAR (LPA) or IPA (Implementing Agency). Alternative measures need to be taken to ensure that adequate internal control arrangements are maintained until the SAI's methodology and capacity are confirmed.

The Borrower will ensure that adequate internal control and internal audit arrangements acceptable to IFAD are in place to ensure that funds are used for intended purposes. All documents and records of the project will be retained in accordance with IFAD's policies and procedures. The project will use the Project Implementation Manual for internal control arrangements. An internal auditor will be recruited to perform semi-annual internal audits.

Accounting Systems and Financial Reporting mechanisms

The Government has integrated a Financial Management Information System (SIGFE). There is a lack of data integrity checks in SIGFE: no system audits etc. The modernization and integration of information systems still requires improvements. Many municipalities still do not have their own treasury sub-accounts, thus hampering the effective use of SIGFE. The World Bank is currently carrying out an assessment on SIGFE and working with the Government to identify gaps in accounting and financial reporting to address the gaps so that the system can be used for donor-funded projects. AFAP-II will purchase an automated accounting software to maintain the project's accounts and generate reliable financial information and reports. The basis of the accounting will be the International Public Sector Accounting Standards (IPSAS), cash basis. Financial records will be segregated for each financing instrument. The project will prepare Interim Financial Reports with agreed templates and submit the reports to IFAD within 30 days after the end of the quarter. To ensure quality of IFRs, IFAD will provide the required training after effectiveness and during the project implementation. The project's financial year-end will be 31 December, and unaudited annual financial statements will be submitted to IFAD by 30 April of each financial year. The PMU will also ensure compliance with EU financial management guidelines, including accounting and financial reporting, which will be outlined in detail in the PIM.

e. External Audit

The Court of Accounts (SAI) has the responsibility of performing the external audits. The necessary information is not publically available to verify the coverage of audits carried out by the Court of Accounts. In addition, the SAI has not carried out audits consistently. Therefore, there is no knowledge about the SAI's methodology, the scope of the audit they perform or their capacity. In addition, there is no information about the timeliness of submission of audit reports.

Therefore, AFAP-II financial statements will be audited annually by a private external audit firm acceptable to IFAD in accordance with International Auditing Standards (SAI) and IFAD's Handbook for Financial Reporting and Auditing. The audit report, together with the Management Letter, will be submitted to IFAD within six (6) months after the end of each financial year. The audit terms of

reference will be subject to IFAD's no objection, and the scope of the audit will cover all financiers, provinces and review of IFRs.

VI. Implementation Readiness

Table 3: FM Actions Summary: The actions needed to mitigate FM risks are summarized below:

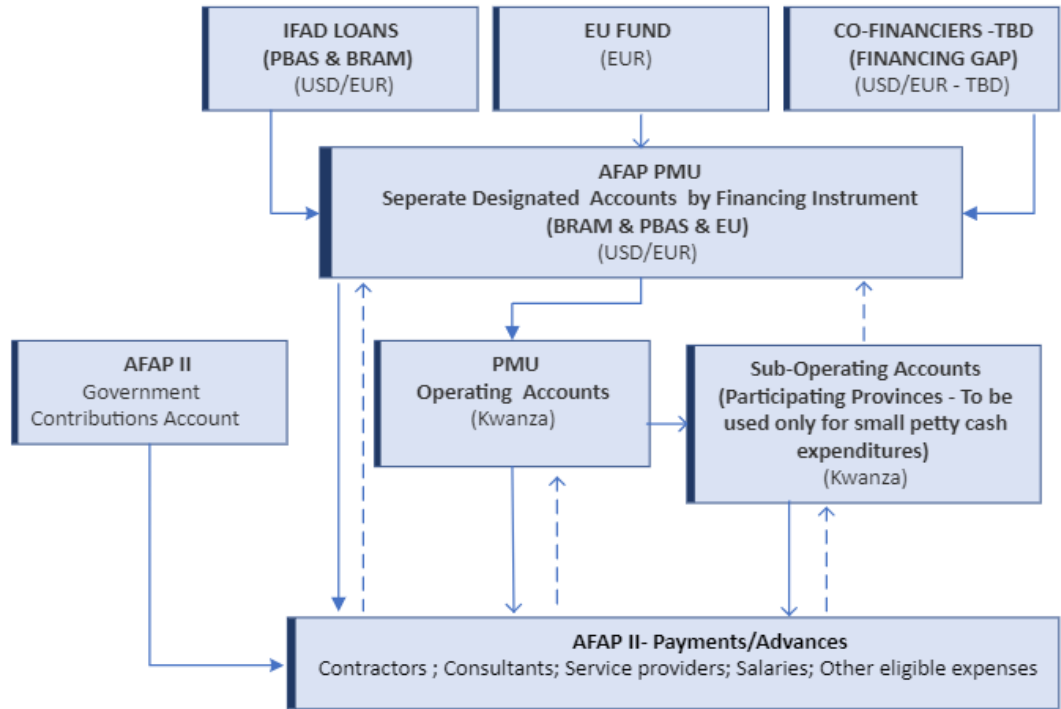
	Action	Responsible Party / Person	Target Date / Covenants ¹
1	Development of a comprehensive Project Implementation Manual (PIM), which is including Financial Management Section.	PMU/IPA	EIF - Disbursement condition
2	Experienced Financial Management staff to be hired from the open market on a competitive basis, and each staff member to complete the IFAD e-learning course within 2 months of the start of the project.	PMU/IPA	Within 2 months of EIF - Disbursement condition
3	Procurement of ERP (PHC) off-the-shelf accounting software.	PMU/IPA	Within 2 months of EIF - Disbursement condition
4	Recruitment of an external audit firm	PMU/IPA	Within 6 months entry into force (dated covenant)
5	The project's Annual Work Plan and budget will be prepared and submitted to IFAD 60 days before the start of the new FY to avoid delays in start-up.	PMU/IPA	60 days before the start of the new financial year.
6	Semi-annual internal audits will be conducted by internal auditor and reports will be shared with IFAD. The management will take the necessary action to address the findings. Status of the recommended actions will be disclosed in the quarterly interim financial reports.	PMU/IPA	During implementation
7	Recruitment of external auditors at early stages of the project to avoid delays in audit report submission.	PMU/IPA	Within 6 months of effectiveness.

FM Supervision plan

During the implementation, FMD will assess and monitor the adequacy of the PMU's financial management arrangements, such as accounting and financial reporting, budgeting, internal controls, flow of funds and external audit, through supervision missions, which will take place at least on an annual basis. In the event that IFAD identifies weaknesses in the financial arrangements, it will require AFAP-II to take the appropriate measures to mitigate those risks.

IFAD will especially focus on specific areas where risks are most likely to be present such as grants, training and workshop activities.

Appendix 1: Flow of Funds Chart



- Fund Flows
- - - - Document Flows

Angola

Artisanal Fisheries and Aquaculture Project Phase 2 Project Design Report

Annex: Potential Afap 2 Collaboration Partners

Mission Dates: 27/11/2023 - 10/01/2024

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Programme Management Department

Potential AFAP-2 Collaboration Partners

Partner	Project (existing or planned)	Potential areas of collaboration
<p>a) IFAD-Supported Projects</p> <ul style="list-style-type: none"> ✓ Smallholder Resilience Enhancement Project (SREP) ✓ Smallholder Agriculture Development and Commercialisation Project for the Provinces of Cuanza Sul and Huíla (SADCP - C&H)/SAMAP 	<p>✓ GoA is implementing two IFAD-funded projects in the agricultural sector: SREP and SAMAP.</p>	<p>The IFAD-funded projects were essential for drawing lessons for the AFAP-2 project design and implementation.</p> <ul style="list-style-type: none"> ✓ The Smallholder Resilience Enhancement Project (SREP) is being implemented in 7 provinces, 3 of which are targeted for AFAP-2. The provinces include Bengo, Cuanza Note and Uige. Synergies can be built in (i) fish feed production using cereals produced by smallholders supported under SREP. Furthermore, (ii) common market infrastructure constructed in the three provinces to contain agricultural produce and a section for fish, (iii) integration of aquaculture/fishing activities within SREP-supported beneficiaries to address nutrition aspects of the target population. ✓ The SADCP - C&H)/SAMAP could provide important lessons and build synergies with AFAP-2 on strengthening capacity for rural enterprises.
<p>b) Food and Agriculture Organisation (FAO) of the UN. FAO is the GoA key partner for agricultural, fisheries sector policy design and review, rural extension service capacity strengthening, including the Farming Field School.</p> <p>c) ESCOMAR project focused on supporting women processors with training and basic infrastructure for fish processing.</p>	<p>ESCOMAR is in the pipeline (planned)</p>	<ul style="list-style-type: none"> ✓ FAO can partner with IFAD-funded projects in areas of policy, extension, producer organizations and rural commercialization. ✓ Another area of potential partnership is in fish processing and engagement of women to improve quality and value addition.
<p>d) World Bank. (i) Angola Agricultural Transformation</p>	<p>✓ The PDAC is an ongoing project covering Corridor</p>	<p>✓ Synergies built between the World Bank-funded project and</p>

<p>Project (MOSAP3) (ii) Angola Commercial Agriculture Project (PDAC), Supporting farmers through productive alliances to reach new markets and establish commercial relationships; Strengthening business practices and VC development through public-private dialogue to benefit agribusiness SMEs, including Partial Credit Guarantees</p>	<p>(A): Luanda –Bengo – Malanje – Cuanza Norte, and Corridor (B): Luanda –Bengo – Huambo – Bié –Cuanza Sul – North of Huila.</p>	<p>AFAP-2 through MOSAP3 activities, such as agro-climate information services in AFAP-2 provinces, implemented nationwide PDAC market linkages in Cuanza-Note and Malanje provinces.</p>
<p>e) World Food Programme</p>	<p>✓ The WFP is supporting ongoing IFAD-funded projects to implement nutrition interventions.</p>	<p>✓ Possible synergies between WFP and AFAP-2 can be built around the implementation of nutrition interventions, as AFAP-2 is considered a nutrition-sensitive project.</p>
<p>f) African Development Bank (AfDB) (i) Cabinda Province Agriculture Value Chains Development Project 2018 – 2026; (ii) Fisheries Sector Support Project 2013-2023 (extended); and (iii) Within the AfDB country strategy 2017 to 2021 (extended to 2023),</p>	<p>✓ The AfDB Cabinda Province Agriculture Value Chains Development Project is ongoing until 2026, while the Fisheries Sector Support Project 2013-2023 is completed.</p>	<p>✓ Synergies between the Cabinda Province Agriculture Value Chains Development Project and AFAP-2 could be built around knowledge sharing in the fisheries component and institutional engagement.</p>
<p>g) European Union (EU) The Blue Economy Pipeline project</p>	<p>✓ The EU is contemplating the implementation of a blue economy project with a strong focus on capacity building.</p>	<p>✓ Synergies with the EU are expected in co-financing AFAP-2 in areas of capacity building.</p>
<p>h) Government of Iceland</p>	<p>Government of Iceland has signed MoU with IFAD covering Technical Assistance on: i) sustainable fisheries; ii) renewable energy; iii) land restoration; iv) gender; and v) youth.</p>	<p>Potential TA with Iceland in areas of sustainable fisheries and renewable energy</p>

Angola

Artisanal Fisheries and Aquaculture Project Phase 2

Project Design Report

Annex: Procurement Assessments 1

Mission Dates: 27/11/2023 - 10/01/2024

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Project No. 2000003952

Report No. 6838-AO

East and Southern Africa Division
Programme Management Department

Procurement Assessments

IFAD PRM - Part A: Country Level

Based on MAPS II – ASSESSMENT OF NATIONAL PROCUREMENT SYSTEM FOR ANGOLA

OECD Pillar I – Legal, Regulatory and Policy Framework					
Indicator and Sub-Indicator #	Sub-Indicator Description ¹	Findings regarding possible non-compliance with IFAD PPF	Inherent Risk of non-compliance with Project Objectives & IFAD PPF	Proposed Mitigation measure/s	Net Risk
1	The public procurement legal framework achieves the agreed principles and complies with applicable obligations.				
1(a)	Scope of application and coverage of the legal and regulatory framework	Public Procurement in Angola is governed by Law No. 41/20, of 23 December 2020 ("the Public Contracts Act"). It is supplemented by several Presidential directives. The law applies to Contracts for Goods, Public Works and the acquisition of services entered into by Public Entities which benefit from funds from the General State budget. It also applies to Concessions and PPPs as well as to contracts entered into by the bodies of Defence, Security and Internal Order except for those which are declared secret.	M	Project to use IFAD Guidelines and Handbook as allowed under Article 7 (1) (a) of the Angolan Public Contracting Law 41/20 of December 2020.	M
1(b)	Procurement methods	The Procurement Act has established the main methods of procurement for goods, services and works, and the conditions for their use. The use of ICB only allowed for contracts advertised under NCB with a value above AOA 182,000,000 (approx. \$220,000). The Act does not prescribe selection methods for consulting services.	H	Revise the law to provide for all methods and the thresholds for use. Project to use IFAD SBDs and templates. When it is necessary to use DC/SSS, the Project shall seek IFADs NO.	H

1(c)	Advertising rules and time limits	<p>Prescribed time for advertising NCB and limited bidding is between 20 and 120 days in order to provide for their preparation under ample conditions and with effective competition.</p> <p>Time limit for RFQ is 6 days. There is no defined time limit for procurement using the DC method.</p> <p>There are no prescribed timelines for consulting services since selection methods for this category of procurement are not included in the Act.</p> <p>There is a requirement for publication of tenders in a local newspaper with wide circulation, in the National Gazette (Diario da Republica) and in the Public Contracting Portal. However, the latter is not yet active.</p>	S	<p>Ensure publication of GPNs of all planned activities.</p> <p>Follow IFAD Procurement Guidelines with respect to extension of time, definition of time frames and wide publicity of procurement opportunities.</p>	S
1(d)	Rules on participation	<p>For Works of a duration of more than 90 days, foreign firms need a local representative.</p> <p>Foreign firms can only participate in NCB bids whose estimated value is equal to or greater than AOA182,000,000.</p>	M	Use IFAD Procurement Guidelines and Handbook, SBDs and provisions in the Procurement Arrangements Letter.	M
1(e)	Procurement documentation and specifications	Complies. The Act prohibits the use of brand names and labels, and requires technical specifications are defined by reference to national or foreign standards.	L		L
1(f)	Evaluation and award criteria	<p>The law forbids the use of any other criteria other than those stated in the invitation documents. The Regulations further forbid disclosure of confidential information on examination, clarification and evaluation of bids. Proposals are evaluated in accordance with the award criteria established in the tender program.</p> <p>The award criteria can be either the Most economically advantageous tender or the tender with the lowest price (Art. 82).</p>	M	Introduce appropriate methodology and evaluation criteria for consulting services.	M

1(g)	Submission, receipt and opening of tenders	The law provides that bids are open the next business day after the submission date. However, if justified, the opening session can occur within 10 days of the initial date. This is not in line with international best practices and the risk impact on confidentiality obligations of the Contracting Entities.	H	Amend the law to provide for bid opening immediately after closing date and time in line with best practice.	H
1(h)	Right to challenge and appeal	The Act grants the right to hierarchical review by any aggrieved tenderer and it establishes clear procedures for handling of appeals. The Procurement law is silent with respect to the publication of Appeal Decisions.	M	In addition to the provisions of the Act, the Project should use IFAD Procurement SBDs which contain detailed protest and appeal procedures.	M
1(i)	Contract management	The manner of contract, execution, supervision and monitoring is provided in Article 366 of the Act. The procedure for amendments is clear. However, there are no established thresholds for contract amendment approvals.	M	The Project to follow the thresholds provided in the Procurement Arrangements Letter.	M
1(j)	Electronic Procurement (e-Procurement)	e-procurement has not yet been implemented although the law prescribe rules for the operation and use of electronic platforms by the public contracting entities.	M	Take initiative to implement e-GP system in public procurement to increase transparency and fair access to information. Project to use IFADs end-to-end procurement system and CMT.	M
1(k)	Norms for safekeeping of records, documents and electronic data.	The law does not prescribe a list of the main documents to be kept in the procurement file.	S	The Project should keep the procurement records prescribed in the Procurement Handbook. It should additionally keep contracts to the cloud or other safe electronic environment.	S

1(l)	Public procurement principles in specialized legislation	The law does not apply to SOEs that do not benefit from operational subsidies or funds from the State Budget as well as defense and security contracts that are declared secret.	H	Use the IFAD Procurement Guidelines to ensure transparency, effectiveness and equity of procurement outcomes.	H
2	Implementing regulations and tools support the legal framework				
2(a)	Implementing regulations to define processes and procedures conditions	Implementing rules are not updated in a timely manner.	M	Use the IFAD Handbook which has detailed procedures for all the procurement processes.	M
2(b)	Model procurement documents for goods, works and services	Partially complies. Standard Bidding Documents exist except for ICB. There are no bidding documents for consulting services.	S	It is critical for the good operation of the public procurement system to issue a full set of SBDs and to publish the SBDs on the SNCP website. Project shall use the IFAD standard bidding documents until a full set of SBDs is developed, reviewed and found acceptable for use in IFAD-funded projects.	S
2(c)	Standard contract	No standard contract for ICB contracts.	M	Project to use IFAD contract templates.	M
2(d)	User's guide or manual for procuring entities (insert link to manual if possible)	Complies. There is a procurement Manual in place. www.compraspublicas.minfin.gov.ao	L		L
3	The legal and policy frameworks support the sustainable development of the country and the implementation of international obligations				
3(a)	Sustainable Public Procurement (SPP)	The Procurement law includes sustainability and responsibility among the procurement principles in Article no. 3. Some aspects to be considered on sustainability in works contracts are outlined in Art. 203, 226 and 233 of the Act.	M	Project to ensure mitigation measures for SECAP risks are included in technical specifications, bidder's qualifications, bid evaluation criteria and in contract clauses.	M

3(b)	Obligations deriving from international agreement	Complies. Article 7 of the Act provides for application of procurement arrangements arising out of international obligations.	L		L
Consolidated findings for Pillar I			S		S
OECD Pillar II – Institutional Framework and Management Capacity					
4	The public procurement system is mainstreamed and well-integrated with the public financial management system				
4(a)	Procurement planning and the budget cycle	Procurement planning is mandatory according to the procurement law; however, it is not being used systematically by the Contracting Entities during the budget formulation process (for instance through the financial management system – SIGFE). There is limited integration between the FM systems (SIGFE) and the multi-year project planning system.	S	Prepare procurement plans aligned to annual work plans, ensure there are adequate fund before execution and monitor their implementation on a regular basis.	S
4(b)	Financial procedures and the procurement cycle	There is no linkage between procurement plans, allocation of budget and availability of funds to ensure timely payment under the Financial Management System. This uncertainty on payment leads to lack of competition, increased prices and delays in delivery of facilities and services.	S	Integrate the procurement system and budgetary system (SIGFE) to provide information on the completion of all major contracts.	S
5	The country has an institution in charge of the normative/regulatory function				
5(a)	Status and legal basis of the normative/regulatory institution function	The Act in Article 11 establishes the National Public Procurement Service (SNCP). The SNCP has the regulatory function and is vested with oversight power and responsibilities on all public procurement	L		L

		activities carried by all public bodies in Angola.			
5(b)	Responsibilities of the normative/regulatory function	The responsibilities cover the operation, regulation, inspection, observation, auditing and supervision of the public procurement system.	L	Expand the definition of SNCP's responsibilities as central regulatory and oversight procurement body to clearly include responsibilities related policy formulation and professionalization of procurement and building capacity of all stakeholders.	L
5(c)	Organization, funding, staffing, and level of independence and authority	There is limited institutional capacity within the SNCP and related procurement units across the public sector. The SNCP does not have full autonomy as it is part of the Ministry of Finance and reports directly to the Minister of Finance. Its decisions are subject to the MOF's endorsement. There may be risk of undue political influence.	S	Elevate SNCP status and increase its authority in public procurement. Additionally, resource SNCP to secure its autonomy and enable it to effectively fulfill its mandate.	S
5(d)	Avoiding conflict of interest	There is possible conflict of interest between the functions and powers of SNCP. For example, the role of reviewing and clearing procurement transactions of all Procuring Entities under "power" conflicts with "functions" of regulation, monitoring, and oversight and complaints handling.	S	Amend the law to address the conflict of interest in the activities of the SNCP that are normally supposed to be segregated.	S
6	Procuring entities and their mandates are clearly defined.				
6(a)	Definition, responsibilities and formal powers of procuring entities	Art. 6 of the Act defines public contracting entities and their powers, public procurement roles and responsibilities.	L	Define clear roles and accountabilities for project procurement staff. Establish clear financial delegation of authority in the PMU.	L
6(b)	Centralized procurement body	Art. 178 of the Act prescribes setting up of Purchasing Centres/Hubs which allow Procurement Entities to centralize the	L		L

		contracting of public works, the acquisition of movable goods and services.			
7	Public procurement is embedded in an effective information system				
7(a)	Publication of public procurement information supported by information technology	The current procedure in place for collecting and monitoring procurement data is manual. There is no readily available statistics on procurement undertaken through different methods.	S	<p>Improve the system of collecting data/statistics and monitoring of performance.</p> <p>Regularly update the Procurement Portal with information and documents relating to laws, regulations, manuals and master procurement documents, information regarding contract awards, and information on complaints handled by the SNCP.</p>	S
7(b)	Use of e-Procurement	Dynamic Electronic Procedure is carried out on an electronic platform to procure standardized goods and services using an electronic catalogue. Use of e-procurement is yet to be expanded to cover other procurement procedures.	H	<p>Scale up the ongoing e-procurement agenda in order to move toward the electronic bid submission for all procurement procedures.</p> <p>The Project to use the IFAD end to end OPEN system.</p>	H
7(c)	Strategies to manage procurement data	There is no strategy to manage procurement data for the entire procurement process and to make it accessible to the public.	H	SNCP should put in place a system to maintain comprehensive records/information to analysis of trends, efficiency and economy of procurement.	H
8	The public procurement system has a strong capacity to develop and improve				
8(a)	Training, advice and assistance	The SNCP provides methodological assistance and consultations to Contracting Entities on public procurement procedures. There are no structured training programs and performance monitoring systems.	M	SNCP should review the actual capacities of contracting entities and their staff, including a training needs assessment, and develop and implement a capacity building strategy to address the identified needs.	M

8(b)	Recognition of procurement as a profession	Procurement is not recognized as a profession in Angola and, as a consequence, there are no specific public procurement positions with dedicated, matching approaches for engagement, management and training of procurement staff.	S	In collaboration with relevant stakeholders, SNCP should develop the curriculum for training of procurement cadre and implementing mechanisms for certifying the specialists within contracting authorities responsible for conducting public procurement.	S
8(c)	Monitoring performance to improve the system	No consistent performance monitoring system.	S	Have in place a performance monitoring system with key performance indicators for training, evaluation and promotion of staff concerned.	S
Consolidated findings for Pillar II			S		S
OECD Pillar III – Public Procurement Operations and Market Practices					
9	Public procurement practices achieve stated objectives				
9(a)	Procurement Planning	Procurement planning is a mandatory requirement in the Act. Public procurement planning is carried out annually according to the provisions of the legal framework and according to the needs of the Contracting Authority. However, Procurement decisions not based on market analysis and risks due to absence of market scoping to determine procurement planning strategy.	M	Adopt a risk-based approach to procurement planning. Project to use IFAD procurement planning template and the end-to-end OPEN system for monitoring milestones.	M
9(b)	Selection and contracting	The Act only contains selection methods for goods, services and works and the condition for their application. The law does not prescribe a default method and selection methods for consulting services are lacking.	S	Amend the Act to include specific provisions on the selection of consultants and procedures for assessment of technical capability. Specify open competition as the default method of procurement to encourage competition, transparency, equity and value for money.	S
9(c)	Contract management in practice	Contract management is provided for under Title VI of the Act. There is absence of a contract management system. There are no approval	S	Ensure an effective contract administration and management system. Project to maintain an updated record of all contracts in CMT.	S

		thresholds for contract amendments and information regarding contract awards is limited.			
10	The public procurement market is fully functional				
10(a)	Dialogue and partnerships between public and private sector	There is limited use by the public sector of the institutionalized mechanisms for cooperation and consultation with business associations.	M	There is need to sensitize the private sector/business associations to participate effectively in the decision-making process and help them to strengthen the capacities and knowledge of their members to access the procurement market.	M
10(b)	Private sector's organization and access to the public procurement market	The Act in Art. 53 and 256 prescribes mechanisms (such as preferences and sub-contracting) to address private sector constraints and boost the private sector participation.	L	Raise contracting authorities' skills in preparing and carrying out procurement with greater focus on value for money, using simple and practical approaches tailored to the supply market. Engage the private sector on a regular basis by providing timely information on available or upcoming procurement activities.	L
10(c)	Key sectors and sector strategies	Apart from preferential and sub-contracting mechanisms, there are no important measures to develop the competitiveness of companies operating in important sectors for public procurement. There are no sector or market risk and opportunity assessments	M	Undertake systematic analyzes of key sectors of the economy are needed for public procurement, including actions to increase the competitiveness of companies.	M
Consolidated findings for Pillar III			M		M
OECD Pillar IV – Accountability, Integrity and Transparency of the Public Procurement System					
11	Transparency and civil society engagement strengthen integrity in public procurement				

11(a)	Enabling environment for public consultation and monitoring	There is no evidence that the government takes into account the input, comments and feedback received from civil society when making changes to the legal framework.	M	Engage in a systematic consultation process with citizens and CSO's before approving amendments to the legal framework.	M
11(b)	Adequate and timely access to information by the public	Public procurement data is not systematically collected, compiled, analyzed and disseminated. There is a procurement Portal but it is not updated regularly. SNCP relies on information provided by the contracting entities to produce statistics on the system but the information is not complete, as some entities don't provide information. The law does not explicitly provide a list of documents that should be published.	S	Adjustment of the legal framework to specify the exhaustive list of documents which should be published and available to the public. The project should maintain centralized information repository/portal and ensure it is regularly updated and readily available to stakeholders.	S
11(c)	Direct engagement of civil society	Civil Society representatives are not invited to discussions on the management and completion of the contract, in order to know, in detail, how the contracted party has fulfilled its contractual obligations.	M	Improving regulations and practices regarding the participation of civil society and other stakeholders to participate in procurement for observation and monitoring purposes.	M
12	The country has effective control and audit systems				
12(a)	Legal framework, organization and procedures of the control system	The General Inspectorate of Finance (IGF) is the public financial management internal control entity. The Court of Auditors (Tribunal de Contas) exercise the external audit function.	L	The Project should be subject to regular internal as well as external audits.	L
12(b)	Co-ordination of controls and audits of public procurement	The Court of Auditor carries out its audits in a yearly cycle as set out in the applicable regulations but due to personnel and resource shortage not every contracting entity is covered each year. Although internal audit should be a continuous process, the IGF lacks resources and capacity in procurement and its reviews are not consistent and	S	Ensure the project is audited annually by external independent auditors.	S

		systematic. Although the SNCP has a reasonable level of capacity, it conducts few post-reviews for contract entities every year due to resource constraints.			
12(c)	Enforcement and follow-up on findings and recommendations	There is no evidence of consistent follow up on the implementation of the recommendations. Availability of resources is a critical issue; need for more cooperation.	S	Ensure matters arising from the audit are addressed in a timely manner	S
12(d)	Qualification and training to conduct procurement audits	There are not sufficient auditors trained/or support available for procurement audit.	M	Strengthen the skills of auditors to ensure that the appointed auditors have adequate skills to perform performance audits in the field of public procurement.	M
13	Procurement appeals mechanisms are effective and efficient				
13(a)	Process for challenges and appeals	The process is covered Art. 15-21 of the Act.	L	N/A	L
13(b)	Independence and capacity of the appeals body	The SNCP is involved in the clearance of procurement transactions and the handling of complaints. Lack of an independent review body to handle complaints may lead to lack of confidence by the private sector.	M	Create an internal control mechanism that would avoid the implication of SNCP in transactions.	M
13(c)	Decisions of the appeals body	Appeals are decided within five days of the date of presentation. The decisions of the appeals body are susceptible to litigious appeal under the law.	M	Set up an Independent Appeals Body with representatives of the public and private sector and whose decisions in the administrative system will be final and binding.	M
14	The country has ethics and anti-corruption measures in place				
14(a)	Legal definition of prohibited practices, conflicts of interest, and associated responsibilities, accountability and penalties	Prohibited practices are defined and the associated responsibilities. However, there is no definitions on Anti-Money Laundering and Terrorist Financing, and Sexual Harassment, Exploitation and Abuse (SHEA).	M	Use IFAD SBDs which have comprehensive policies on prohibited practices and on SH/EA in all bid documents.	M

14(b)	Provisions on prohibited practices in procurement documents	The provisions are not comprehensive as they do not include all the IFAD mandatory clauses as indicated in 14(a) above.	M	Use IFAD SBD documents and templates.	M
14(c)	Effective sanctions and enforcement systems	The requirements for debarment of a service provider after a due process are not included in the legal framework.	M	Project to use and supplement the provisions of the Procurement Act with the IFAD Guidelines in the anti-corruption policy following the 'Agreement for Mutual Enforcement of Debarment Decisions' as per the IFAD Policy on Prohibited Practices.	M
14(d)	Anti-corruption framework and integrity training	The anti-corruption laws consist of the Penal Code, the Public Probity Law which is the primary legislation that governs the conduct of public officers and the law on the Criminalization of Infractions Related to Money Laundering (CIML). There is no independent anticorruption authority but there is a specialized Corruption Bureau with the Office of the Attorney General established and mandated to combat corruption.	S	In accordance with paragraph 69 of the IFAD Project Procurement Guidelines, the Project, as well as bidders, suppliers, contractors, consultants and service providers, shall observe the highest standard of ethics during the procurement and execution of contracts financed under IFAD funded Projects. The Revised IFAD Policy on Preventing Fraud and Corruption in its Activities and Operations shall apply to all projects, vendors and third parties, in addition to the relevant national anticorruption and fraud laws.	S
14(e)	Stakeholder support to strengthen integrity in procurement	In their work, the Court of Accounts and the Office of the Ombudsman collaborates with the Specialized Corruption Bureau. Several CSO are active in the country and campaign for transparency. There is no evidence that private sector companies have internal compliance measures.	M	SNCP and the anticorruption institutions should pay increased attention regarding cases of corruption and fraud in public procurement, with the publication of statistical data on such cases. IFAD project to publicize procurement opportunities to ensure wide availability of public procurement information which can in turn spur effective participation by stakeholders (citizens, private sector and civil society).	M

14(f)	Secure mechanisms for reporting prohibited practices or unethical behaviour	There is no secure mechanism for the public to report cases of anti-ethical and illicit practices. There is no whistleblower legislation to offer protection to whistleblowers.	S	Project to encourage anonymous reporting of unethical practices. Where source is disclosed, they shall keep it confidential. It shall also publicize the mechanism for whistleblowers to access IFAD systems under http://www.ifad.org/governance/anticorruption/how.htm .	S
14(g)	Codes of conduct/codes of ethics and financial disclosure rule	The Act sets a code of conduct for the public procurement sector officials and employees (Art. 8, 9 and 10).	L	Evaluation Committee members in the Project shall disclose Conflict of Interest and sign declarations to that effect prior to commencement of evaluations. All procurement staff should sign a Statement of Integrity to commit to the code of conduct. Supplier must sign the Self-certification form to commit ethical conduct and declare conflict of interest.	L
Consolidated findings for Pillar IV			M		M
Consolidated findings at country level based on the assessments above of OECD Pillars I-IV		[to be determined by the SPO]	[to be determined by the SPO]	[to be determined by the SPO]	[to be determined by the SPO]

**IFAD PRM - Part B Project Level
ASSESSMENT OF THE PROJECT'S PROCUREMENT IMPLEMENTATION ARRANGEMENTS**

Assessment Area # and # of related criterion of assessment	Description of Assessment Criterion	Findings regarding possible non-compliance with Project Objectives & IFAD PPF	Inherent Risk of non-compliance with Project Objectives & IFAD PPF	Proposed Mitigation measure/s	Net Risk
Overall Assessment of the risk posed by Part B		[to be determined by the SPO]	[inherent risk to be determined by the SPO]	[to be determined by the SPO]	[net risk to be determined by the SPO]
1. ASSESSMENT OF PROJECT COMPLEXITY					
1.1.	Project is new of its kind and introduces new procurement methodologies	Project will scale up AFAP 1 results to 5 provinces	L		L
1.2.	Project investment value is high and includes substantial inter-dependent procurement contracts that require advanced sequencing and coordination skills	Some components of the project involves procurement of works/infrastructure which are complex and require scheduling.	S	Establish a contract management plan to guide sequencing of activities and manage dependencies, task timings, ownership, quality assurance and control, and progress against targets.	S
1.3.	Project area is geographically spread in different locations	Project area covers 5 provinces.	M	Since the procurement structures at the provincial level are assessed as weak, all procurement for the project will be centralized at the PMU level and the implementation of high value and complex contracts will be closely monitored.	M

1.4.	Project includes a number of implementing partners and cooperating agencies	There is only one Implementing Agency that will oversee the project..	L		L
1.5.	Project involves community participation in procurement activities which calls for detailed monitoring requirements by IA	Yes	M		M
1.6.	Project is classified with High or Substantial SECAP risks (including security risks)	SECAP risk rating is Moderate. The implementation of AFAP-2 activity will be in ecologically or socially non-sensitive areas.	M	Implement the Environment and Social Management Framework (ESMF), including the generic Environment and Social Management Plan developed during Project design. Incorporate SECAP procedures in specifications, bidder's qualifications and contracts clauses.	M
1.7.	Project is in a Fragile State with weak governance structures	No	L		L
1.8. Overall Assessment of the risk posed by Criterion 1.			M		M
2. ASSESSMENT OF IMPLEMENTING AGENCY CAPACITY (Process/Procedures, Personnel and Performance/Product - 3Ps)					
2.1.	PROCESS/PROCEDURES				
2.1.1.	ASSESSMENT OF IA's Procurement Legal & Regulatory Frameworks (Procurement Rules, Methods and Processes)				
2.1.1.a.	IA procurement methods for Goods, Works and NCS (non-consulting services) are	N/A			

	consistent with IFAD Project Guidelines				
2.1.1.b.	IA Procurement methods for Consulting Services are consistent with IFAD Guidelines and prioritize Quality.	N/A			
2.1.1.c.	Access to IA bidding opportunities and bidding/procurement documents is unrestricted for foreign firms	N/A			
2.1.1.d.	Bidders, IA procurement staff and the general public have free access to the legal and regulatory framework documents	N/A			
2.1.1.e.	The mandatory Minimum number of received quotations/bids in competitive procurement methods is consistent with IFAD PPF ²	N/A			
2.1.1.f.	IA's standard Bidding /Procurement Documents and standard contracts (including contractual dispute resolution) are consistent with IFAD standard procurement documents in structure and contents	N/A			
2.1.1.g.	IA's standard Bidding/Procurement Document incorporate IFAD SECAP requirements (to what extent?)	N/A			
2.1.1.h.	IA's standard prequalification documents are consistent with IFAD's and qualification criteria reflect needed past experience,	N/A			

² PPF: Project Procurement Framework

	production capacity and financial/cash flow sufficiency				
2.1.1.i.	Bid evaluation criteria are objective, proportionate and based on VFM considerations in the case of Goods/Works/NCS (lowest evaluated cost, Merit Point, lowest price or life cycle cost) and emphasize Quality in the case of consultancy services consistent with IFAD's PPF.	N/A			
2.1.1.j.	Minimum number of days for advertised procurement under IA's competitive bidding processes is consistent with IFAD PPF	N/A			
2.1.1.k.	Bidders' clarification procedure by the IA is consistent with IFAD PPF	N/A			
2.1.1.l.	Bids received by IA prior to the deadline are securely stored and a receipt is given to the bidder	N/A			
2.1.1.m.	Bid securities are securely stored	N/A			
2.1.1.n.	IA's Public bid openings are conducted for advertised procurements immediately after the submission deadline (within an hour of receipt of bids)	N/A			
2.1.1.o.	Minutes of bid opening meetings are recorded and sent to bidders who submitted bids	N/A			
2.1.1.p.	No negotiations at award stage are conducted with the successful bidder that aim at changes in offered bid price or scope unless foreseen in the selected procurement method and	N/A			

	stipulated in the bidding documents				
2.1.1.q.	Under IA procurement rules, bidders have access to a Bidders' Complaint mechanism consistent with IFAD requirements	N/A			
2.1.1.r.	Contract awards are advertised publicly by the IA within reasonable time of contract signature.	N/A			
2.1.1.s. Overall Assessment of the risk posed by Criterion 2.1.1.					
2.1.2.	IA's Procurement Strategy and Procurement Planning Process				
2.1.2.a.	The IA's preparation of its annual procurement plan is preceded by conceptualization of a Procurement Strategy based on market research, previous experience and own capacity assessments	Partially Complies since there has not been a PPS.	M	Preparation of PPS during design.	M
2.1.2.b.	IA's procurement plans are prepared ahead of time and in tandem with request for budget appropriation to MOF (or competent authority in case on autonomous bodies).	procurement plans are not prepared ahead of time. They are only prepared to fit into the resources advised by the Ministry of Finance.	S		S
2.1.2.c.	IA's procurement department staff participate in the annual work planning processes	No. The Procurement staff are not involved in AWPB process. The planning is top down.	S	Project procurement staff to participate in annual work plan and budget preparation.	S
2.1.2.d.	The project's Procurement Strategy adequately addresses project complexity, IA's internal capacity and experience as well as market supply capacity	A PPS is not in place. PP prepared to fit into resources allocated to the IA	S	Project to follow PPS prepared at project design and to update the same annually.	S
2.1.2.e.	IA's procurement plan for the project is consistent with the	Partly complies. Not all procurement	S	Project to ensure that the PP is aligned to	S

	project's annual work plan/budget (AWPB)	related activities in the work plan are captured in the PP.		the AWPB and that no procurement is carried outside the approved AWPB.	
2.1.2.f.	IA's Procurement Plans follow an effective format with planned and actual rows for tracking progress achieved across the 3 different categories of procurement	The IA's procurement plans does not contain the 'actual' row	M	Project to use IFAD PP format.	M
2.1.2.g. Overall Assessment of the risk posed by Criterion 2.1.2.			S		S
2.1.3.	Procurement Management and Contract Administration systems and internal control /audit procedures				
2.1.3.a.	IA's standard contracts for procurement of Goods, Works and Services generally consistent with IFAD contracts	Partially complies. Only a template exists for NCB. There is currently no formats or templates for ICB and consultancy contracts.	S	Project to use IFAD SBD's.	S
2.1.3.b.	IA's standard contracts for procurement of Goods, Works and Services implement IFAD's SECAP requirements	The contracts do not include clauses to address SECAP issues.	M	Project to incorporate SECAP procedures in specifications, bidder's qualifications and contracts clauses.	M
2.1.3.c.	The IA has established internal control systems with Segregation of Authority including effective separation between procurement and financial management	Partly complies. The two functions are under the same directorate and there is lack of segregation in some aspects such as payments. Procurement Officers are able to process payments in the system.	S	Project to recruit finance and procurement specialist who should work in separate units to ensure effective segregation of duties and authority between the two functions.	S

2.1.3.d.	The IA has an effective internal audit function in addition to independent and timely external financial audit (having specialized "procurement audit" is a plus)	Complies. There is a department in the Ministry that handles internal audit.	L		L
2.1.3.e.	IA has established contract management procedures and contract management forms for monitoring progress against Time, Cost, Quality and Scope of the signed contracts for Goods, Works and Services.	Partly Complies. The IA has a register of contracts. However, it is not regularly updated.	M	Project to use IFAD CMT for recording all contracts.	M
2.1.3.f.	The IA develops a comprehensive Contract Management Plan for major contracts with clear indication of roles and responsibilities	There are no contract management plans.	S	To institute CMPs that will be monitored periodically.	S
2.1.3.g.	IA's procedures for initiation and approval of Contract Variations are established and clear	There are no documented procedures for contract variations.	M	Establish contract procedures with clear thresholds. The PIM to detail threshold for procurement methods and prior review for the Project.	M
2.1.3.h.	Contract Amendments beyond a prescribed threshold (not exceeding 15% of time duration or contract value) require higher level approvals	Does not comply. Procurement thresholds are discretionary.	H	Establish contract procedures with clear thresholds including for contract variations. Thresholds for contract amendments by the project to be established in the PAL.	H
2.1.3.i.	IA has established procedures for receipt/acceptance of contract outputs in	Complies.	L		L

	Goods, Works and Services				
2.1.3.j.	IA has established procedures for receipt/approval of deliverables and approval of payments for Goods, Works and Services	Complies.	L		L
2.1.3.k.	IA's payment procedures lead to timely payments to the contracted parties in line with IFAD standard contracts.	Partially complies. Significant delays experiences especially for foreign vendors due to shortage of foreign currency in the banking system.	M	Although this is a national problem, the IA should lobby and negotiate to be granted priority by the government in settling payments to foreign contractors in support of implementation of the Project.	M
2.1.3.l.	IA's Contractual Dispute Settlement procedures always provide for amicable settlement and stipulate arbitration for contracts with foreign contracted parties	Complies.	L		L
2.1.3.m.	The IA has well-developed claim assessment procedures for initiating own claims or for verification of validity and costing of contractual claims filed by the contracted parties	There are no documented claim procedures other than reference to claims against insurance policies or suppliers.	M	Project should put in place detailed procedures for claim initiation and resolution of particular events that may result in disputes and seek assistance of relevant government departments on how to cost and validate them.	M
2.1.3.n. Overall Assessment of the risk posed by Criterion 2.1.3.			S		S
2.1.4.	RECORD KEEPING				
2.1.4.a.	A serial-numbered procurement file is maintained for each	Each procurement activity is	L		L

	procurement activity (with records from requisition to acceptance/receipt of goods/works/services)	kept in a box file that is serially numbered and labelled.			
2.1.4.b.	Original contracts secured in a fire and theft proof location	Does not Comply. Original Contracts kept together with other documents in the procurement file in the office.	M	Project to identify file proof location for storage of original contracts. Additionally, all contracts to be filed in the cloud.	M
2.1.4.c.	A separate contract file is maintained with a copy of the contract and all subsequent contractual correspondence e.g. contractual notices by supplier, contractor, purchaser or employer; a detailed record of all changes or variation orders issued affecting the scope, quality, timing or price of the contract; records of invoices and payments, progress reports, certificates of inspection, acceptance and completion; records of claim and dispute and their outcomes; etc.)	A separate file is maintained for each Contract and contains most of the recommended documents except copies of payment vouchers, internal correspondence and other correspondence such as advertisement notices, and contract award notices..	M	Project to ensure that all the recommended documents including correspondence are on file.	M
2.1.4.d.	The IA Procurement & Contract Files are maintained for at least 7 years beyond project closure in a secure place.	Complies.	L		L
2.1.4.e.	The IA maintains an up-to-date Contract Register that records all ongoing contracts (with names, prices and dates) per procurement category for ease of retrieval of contract data	Complies.	L		L
2.1.4.f. Overall Assessment of the risk posed by Criterion 2.1.4.			M		M

2.2.	IA's PERSONNEL CAPABILITIES: IA's Procurement Personnel Capabilities and Procurement resources (systems and facilities).				
2.2.1.	The IA has a dedicated Procurement Department/Unit with a Director and a team of experienced staff	The Procurement Unit falls under the Assistant Director of Administration The staff do not have adequate experience in procurement of donor funded projects and they are not certified procurement practitioners.	M	A qualified and experienced procurement officer to be recruited for the project.	M
2.2.2.	The IA's Procurement Unit has previous experience with donor/IFI-funded procurement procedures	Yes, but there was a Single Procurement Unit staffed with consultants for AFAP 1 and there was no adequate capacity building for the directorate staff.	S	The IA staff should be oriented on IFAD procedures for procurement of works so as to be able to backstop the project staff.	S
2.2.3.	IA's regular annual procurement volume exceeds expected project procurement in value and complexity (i.e. the IA normally conducts more and more complex procurement than what is required as part of the project)	The annual procurement volume and expenditure for the IA is low. The expected procurement for the project is expected to be higher than that of the IA.	M	The project should engage a qualified and experienced procurement officer to process the expected procurement under the project.	M
2.2.4.	IA's procurement staff have Job Descriptions that cover all foreseen functions of the intended project procurement	There are job descriptions related to procurement roles and responsibilities but no requirements that those working in procurement should have in terms of procurement education or training.	S	The staff should be facilitated to access procurement training to enhance their skills.	S

2.2.5.	The number and qualifications of the staff of the IA Procurement Department are sufficient to undertake the additional procurement that will be required under the proposed project	The directorate has sufficient staff but they possess qualifications in areas that not related to procurement and they have no professional procurement qualifications.	S	The staff should be encouraged to enroll for the IFAD BUILDPROC course. Extra support is required especially in orientation of the staff on IFAD procurement procedures.	S
2.2.6.	The IA Procurement Department has adequate facilities such as PCs, internet connections, photocopy facilities, printers, safes etc. to undertake the foreseen project procurement	Complies. The department has adequate facilities and equipment.	L		L
2.2.7.	The IA's Procurement Department staff are certified practitioners or have attended relevant procurement training programmes	Does not Comply.	S	The staff should be supported to enroll for the IFAD BUILDPROC course.	S
2.2.8.	The IA's Procurement Department staff are capable of working in one of IFAD's official languages	The staff do not have adequate working capability in english.	S	Project to recruit staff who are proficient in both in English and Portuguese languages.	S
2.2.9.	The Project Director is issued a Project Charter granting him/her sufficient authority to control and authorize project activities (documented in PIM)	There is no charter but the authority of the Director General is clearly documented in the Decree that created IDA.	L		L
2.2.10.	The IA has access to claim initiation or claim assessment experts either internally or externally especially for large value contracts with foreign vendors.	The IA has access to claim assessment experts form other government departments like the	L		L

		buildings department.			
2.2.11. Overall Assessment of the risk posed by Criterion 2.2.			S		S
2.3.	IA's PERFORMANCE (PRODUCTS & PAST EXPERIENCE) - guided by quantitative indicators of Pillars II and III of OECD MAPS II (based on performance of the previous year)				
2.3.1.	% of the total annual IA contracts that are awarded in open and restricted bidding	45 contracts under open tendering. 21 contracts under restricted tendering.	L		L
2.3.2.	Percentage and value of IA's annual contracts that are awarded under direct contracting (single source)	40 contracts	H	Project to limit use of DC/SSS to situations that can only be justified in line with the provisions of the IFAD Procurement Handbook.	H
2.3.3.	IA's Efficiency in completing the bidding process (open and restricted) for Goods (measured in time from advertisement to contract award and signature)	90 days for goods for open competition; 45 days for restricted tendering.	L		L
2.3.4.	IA's Efficiency in completing the bidding process (open and restricted) for Works (measured in time from advertisement to contract award and signature)	120 days for open competition; 60 days for restricted bidding.	L		L
2.3.5.	IA's Efficiency in completing the competition process for Services (measured in time from advertisement to contract award negotiations and signature)	150 days for QCBS; 60 days for other methods.	L		L
2.3.6.	% of bidding documents for Goods/ Non-Consulting Services and Works in the last one or two years where more than one amendment to the bidding documents was issued	2% of contracts amended; 7% cancelled.	L		L

2.3.7.	% of RFPs for consulting services where more than one amendment to the RFP was issued	1%	L		L
2.3.8.	% of procurement competitions in Goods /Non-Consulting Services, Works and Consulting Services that failed or were cancelled	1%	L		L
2.3.9.	Average number of responsive bids in Goods/Non-consulting Services, Works and Consulting Services competitions	5 bids	L		L
2.3.10.	% of procurement competitions for Goods/ Non-Consulting Services, Works and Consulting Services conducted electronically	None	L	Project to use IFAD OPEN system	L
2.3.11.	% of contracts awarded to SMEs in the previous year	None	L		L
2.3.12.	% of procurement competitions and contracts that integrate sustainable procurement considerations (at least 1 social/labour plus 1 environmental criteria)	3%	M	Project to incorporate sustainable criteria in bidding documents.	M
2.3.13.	Percentage of IA's contracts for Works with cost over-runs above 10% of initial contract price.	None	L		L
2.3.14.	Percentage of IA's contracts for Works with time over-runs above 10% of initial contractual duration	None	L		L
2.3.15.	Average number of complaints received from bidders as to the fairness of bidding documents or contract award	None	L		L
2.3.16.	% of bidders' appeal decisions that were accepted and enforced (with ruling against the IA)	There were no appeals	L		L
2.3.17.	% of Vendors Invoices paid on time	95%	L		L

	in Goods/Non-Consulting Services, works and Consulting Services contracts.				
2.3.18.	<p>Is the general quality of documents produced by the IA's Procurement Department in line with IFAD's expected quality levels:</p> <ul style="list-style-type: none"> i. Quality of Bidding Documents for Goods/NCS and Works ii. Quality of RFP for Consulting Services iii. Quality of Bid Evaluation Reports iv. Quality and adequacy of responses to bidders' qualifications 	<p>Partly complies. The documents have some deficiencies. Prohibited and practices do not meet the IFAD threshold as there is no mention of anti-corruption, sexual harassment and abuse, money laundering and anti-terrorism. ICB procurements follow NCB template.</p>	M	<p>Project to ensure that documents include all IFAD mandatory clauses. Use IFAD template for ICB and consultancy services. Offer additional capacity building on bidding and contracting processes.</p>	M
2.3.19.	<p>Management / Procurement Audit:</p> <ul style="list-style-type: none"> i. % of IA contracts subjected to specialized procurement audit ii. the IA timely implements recommendations 	None	L		L
2.3.20. Overall Assessment of the risk posed by Criterion 2.3.			M		M
2.4. Overall Assessment of the risk posed by Criterion 2.			S		S
3. Overall Assessment of the risk posed by Parts A and B		<p>[to be determined by the SPO]</p> <p>The overall risk for Part A and B is assessed as Substantial.</p>	<p>[inherent risk to be determined by the SPO]</p> <p>The inherent risk overall for both parts is assessed to be Substantial.</p>	<p>[to be determined by the SPO]</p>	<p>[net risk to be determined by the SPO]</p> <p>The overall net risk for both Parts A and B is assessed to be Substantial.</p>

Quality Assessment Matrix/Checklist – AFAP-2, ANGOLA

Pillars/Areas of Quality assessment	Parameter/issue requiring QA scrutiny	Rating of this Parameter (Six-Points Rating Scale or Assessment Scale)
1. National Legal and Institutional frameworks of Public Procurement in the Borrower's country	<i>The assessment of the Acceptability of the National Procurement system is based upon analysis of the below-mentioned parameters and, in case of deficiency, assessment of Quality will scrutinise the expected effectiveness of foreseen mitigation measures:</i>	<p style="text-align: center;">4</p>
	<p>1. The national public procurement legal framework achieves the established IFAD procurement principles and complies with applicable obligations and the hierarchy of national legal instruments is clearly established (law, Regulations and procedures).</p>	<p style="text-align: center;">4</p> <p>There is a Public Procurement Act supplemented by presidential decrees and a Procurement Procedures Manual.</p> <p>Mitigating measures: Supplement the instructions with the procedures in the IFAD Handbook and Procurement Arrangements Letter.</p>
	<p>2.National Procurement Methods are sufficient to meet the full range of project's needs with clear conditions for use of less competitive methods and ensure value for money, fairness, transparency, proportionality and integrity.</p>	<p style="text-align: center;">3</p> <p>There are conditions for use of the various methods for goods and services. However, since the law does not distinguish consulting services from goods and services, there are no methods for selection of consulting services.</p> <p>Mitigation: Project to use the IFAD procedures for selection of consultants.</p>
	<p>3.National Advertisement rules are compatible with IFAD requirements</p>	<p style="text-align: center;">4</p> <p>The Act provides minimum advertising duration of 20 days and a maximum of 120 days for bids (Article 67). It does</p>

		not provide a specific duration for each method. Mitigating measures: Project to apply the minimum timelines stipulated in the IFAD Handbook.
	4. Rules for participation do not exclude foreign bidders based on nationality or unnecessary national requirements	6 Complies.
	5. Bidders' qualifications criteria are pass/fail and related to deliver the specific contract. (Exclusions can be justified	6 Complies. Evaluation of bidders qualification is on pass/fail basis at preliminary examination of the required qualifications.

Chapter IV: IFAD Procurement Functions at the Project Design Stage (PDR) Part II

	in case of convictions related to criminal or corrupt activities, non-payment of taxes and social security contributions and for administrative debarment under the national law)	
	6.National domestic preferences rules are in line with IFAD's requirements	3 It is left to the discretion of persons issuing a tender programme or invitation for presentation of bids to establish preference rules except when the criterion for the awarding is the most economically advantageous bid, the bid tender program or

		invitation for presentation of bids may establish an increase of the overall score attributed to national vendors which may not exceed 10% of the price proposed by the latter.
	7. National Law/Regulations require that Bid evaluation process is confidential and bid evaluation criteria are objective, relevant to the subject matter of the contract, and precisely specified in advance in the procurement documents.	<p>5</p> <p>Partially Complies. Although the law emphasizes confidentiality in Art. 351, there is a contradiction in Art. 74(a) which grants bidders the right to examine all the documents/bids presented during the tender opening session. There is a risk that confidentiality obligations may not be fully upheld by procuring entities.</p> <p>Mitigation: Project to follow bid opening and evaluation procedures prescribed in the IFAD Procurement Handbook.</p>
	8. National Law/Regulations require that Quality is the basis for selection in consultancy services	<p>3</p> <p>The law does not distinguish consulting services from other services and it does not provide selection methods for consulting services. Evaluation of consulting services is therefore subjected to the same procedure as goods and other services.</p>
	9. National Law/Regulations require "public" bid opening and disclosure of record of bid opening session	<p>6</p> <p>Complies. The Act provides that the bid opening session is a public act and records of proceedings are made available to bidders.</p>
	10. National Law/Regulations require neutral specifications based on international norms while admitting equivalent national standards, and provide for the use of functional /performance specifications where appropriate.	<p>6</p> <p>Complies. The law allows defining specifications by reference to the national or foreign norms. It forbids use of brands, patents, or types of brands, or indicate a particular origin or production, unless it is impossible to describe the specifications, in which case the use of those is allowed, accompanied by</p>

		the expression “or equivalent” (Art. 49).
	11. National SBDs are available and the contents of the such documents is sufficient for suppliers/contractors/service providers to respond to the procurement requirement on fair and non-discriminatory basis. National SBDs include provisions on Fraud and Corruption, IFAD’s right to audit, SECAP standards and SH/SEA provisions equivalent to those in IFAD’s SBDs.	3 No SBDs available for ICB and Consulting services. National SBD includes does not contain provisions on Fraud and Corruption, IFAD’s right to audit, SECAP standards and SH/SEA provisions equivalent to those in IFAD’s SBDs. Mitigation measures: Project to use IFAD SBD including the revised policy on preventing fraud and anticorruption and the SECAP requirement
	12. National SBDs include standard contract conditions which are consistent with internationally accepted practice and which prescribe arbitration as an ultimate forum for dispute settlement in case of contracts with foreign vendors.	3 To be assessed once the documents are shared with IFAD. Mitigation measures: To use IFAD SBD including the revised policy on preventing fraud and anticorruption and the SECAP requirement
	13. The national legal framework grants bidders the right to challenge Procuring Entity decisions through a two-tier bidders’ complaint procedure, the second being independent of the procurement operations and is empowered to grant remedies that are necessary to enforce compliance with the law by Procuring Entities	5 The law prescribes for bidder protests and appeals. There is a hierarchical system for administrative review.
	14. The national legal framework prescribes record- keeping rules (should cover the entire procurement process, including contract management phase), and the PDR addresses these rules in an effective and adequate manner ensuring they are respected in practice efficiently.	6 Complies. A list in prescribed by law and a comprehensive list is provided in the PIM.
	15. National Law/Regulations prescribe the need for a Procurement Manual detailing all procedures for the correct implementation of procurement regulations and laws and which is to be periodically updated.	4 Procurement Manual in place. However, there is need to include detailed procedures for selection of consulting services. Mitigating measures: Supplement the instructions with the procedures in the IFAD Handbook and

		Procurement Arrangements Letter.
	16. National Law/Regulations allow for sustainability and a national SPP (Sustainable Public Procurement) plan exists.	4 There is a mention of sustainability issues in the Regulations to be applied in certain stages of the procurement cycle. Mitigating measures: Project to apply SECAP procedures.
	17. National Guidance documents exist to enable Procuring Entities to introduce a well-balanced application of sustainability criteria to ensure value for money	3 There is no SPP implementation plan in place and the Regulations do not contain specific provisions which require a well-balanced application of sustainability criteria. Mitigating measures: Project to make reference to and apply IFAD SECAP standards.
	18. National Law recognizes precedence of international obligations like those reflected in IFI's Financing Agreements	6 Complies. In Art. 7, the scope of the law excludes the contracts made and entered into by virtue of rules of an international organization, which the Republic of Angola is part of.
	19. Presence and effectiveness of a central Procurement Regulatory authority which is independent from transacting public procurement and assumes its role in disseminating professional guidance and rules concerning prevention of conflict of interest and integrity in the work of bid evaluation committees	5 There is a national procurement oversight body under the Ministry of Finance that covers agency procurement and it is vested with normative/regulatory function in the field of public procurement.
	20. Definitions of fraud, corruption and other prohibited practices in procurement Law/Regulations are consistent with IFAD's and evidence of enforcement is presented.	4 The definition of prohibited practices is not comprehensive. Does not include corruption and sexual harassment exploitation and abuse. Mitigating measures: To use IFAD SBD including the revised policy on preventing fraud and anticorruption and policy on SH/EA and

		ensure commitment to preventing fraud and unethical conduct in procurement activities.
2. Implementation Capacity of the parent Ministry (the Implementing Agency) and related management systems, the capacity of the Project's Implementation Unit (PIU) to undertake project procurement and contract management	<i>The assessment of quality for this Pillar will be based on undermentioned parameters which are meant to measure the capacity of the parent ministry and PIU to undertake project procurement and contract management in a timely and effective manner as per the prescribed design of the project's procurement arrangements and the adequacy of the parent ministry's management systems and related interface with the PIU/PCU/PMU:</i>	4
	<p>1. The parent Ministry (or the Implementing Agency) possesses the 3 P's necessary for project implementation: (i) People (full range of technical and managerial expertise), (ii) Processes (Management systems, delegation of authority, segregation of roles in budget allocation, procurement processing/approval and subsequent payments to vendors. (ii) and (iii) Product/Performance (as demonstrated by successful past experience and ability to deliver public services timely and at the right quality. Foreseen Mitigation measures in the PDR are to be assessed for sufficiency with respect to the 3P deficiencies.</p> <p>Examples of mitigation measures:</p> <ul style="list-style-type: none"> • Creation of PIU • Hiring of Project Management and/or Technical consultants • Formulation of PIM with adequate interface between the project and parent ministry systems and with adequate internal control measures including avoidance of situations of conflict of interest. • Appointment of external auditors, as relevant. <p>Training of parent ministry staff connected with project activities.</p>	<p>4</p> <p>Procurement is part of General Administration department. The latter also oversees Finance. The staff are not qualified procurement experts but are drawn from other disciplines. The IA has limited experience in implementing donor projects.</p> <p>Mitigation:</p> <p>A PIU will be established and a qualified procurement specialist and procurement assistant to be competitively recruited to process and manage procurement activities.</p> <p>A PIM has been formulated at design containing procedures and controls to be followed in executing procurement.</p>
	2. PIU Director is issued a charter with clear reporting lines and well-defined and appropriate delegation of authority to transact project business and command timely provision of needed inputs from the parent ministry's various departments.	<p>5</p> <p>There is no Charter but there is a policy defining</p>

		the roles and powers of the PIU Coordinator.
	<p>3. PIU staffing levels, in case PIU is established:</p> <ul style="list-style-type: none"> • Number and range of expertise of PIU staff is adequate to cover all activities of the project (minimum 1 full-time Procurement Officer and 1 Assistant) • Foreseen tasks of needed consultancy firms are clear and established in completed TORs • Training allocations for PIU staff are foreseen especially when parent ministry staff are seconded to the PIU • PIU personnel for Procurement and Contract Management are at adequate levels of past experience in similar activities • The bulk of PIU personnel are selected based on fair and open competition in accordance with precise job descriptions. 	<p>4</p> <p>The PIU will have 1 procurement officer and one assistant who will be competitively recruited. However, there are no training resources set aside by the IA for training of staff who may be seconded to PIU as gap fillers.</p> <p>Mitigating measures: Orient the procurement staff to IFAD procurement Guidelines and requirements through regular procurement clinics.</p>
	<p>4. Project budget includes adequate financial allocations (salaries, running expenses and per-diems etc.) and other resources (vehicles, decent office working area, equipment and tools etc.) needed by the PIU to deliver its tasks.</p>	<p>6</p> <p>Complies. The items are included in the AWPB in the PDR.</p>
	<p>5. Payment, Quality Assurance and Change Management procedures are fully developed by the PIU or mitigation measures are foreseen to deal with any deficiencies as early as possible at project commencement. Examples: Measures to ensure timely authorization and actual processing of due payments to vendors.</p>	<p>4</p> <p>There are occasional delays in payments to vendors beyond the time prescribed in law.</p>
	<p>6. Codes of Conduct and the consequences of breach of obligations are known to all parent ministry and PIU staff engaged in project activities on part-time or full-time basis.</p>	<p>6</p> <p>Complies. The Act in Art. 8 and 9 prescribes the conduct of civil servants and interested parties. It prohibits practices that are ethically censurable.</p> <p>Violators of the prescribed code of conduct are subject to disciplinary proceedings notwithstanding civil and criminal liability.</p>

	<p>7. The parent ministry's system for suspension/debarment of bidders ensures due process and is consistently applied.</p>	<p>4</p> <p>The Act includes a set of rules concerning infringements and the corresponding fines and ancillary penalties for breaches, as well as the possibility for the National Public Procurement Service to suspend contracts and ban on participation for transgressors. However, the Act also provides possibility of a company being removed from the List of Non-compliant Companies by the body responsible for the regulation and supervision of public procurement if the company in question returns the amounts or the provision of all the services whose non-compliance led to its inclusion on the list.</p>
	<p>8. The project builds-in third party or civil society and stakeholders' access to procurement information as a transparency safeguard and a precondition for effective monitoring of project's procurement operations.</p>	<p>3</p> <p>There is no centralized portal and published information is fragmented. There is no consistent oversight of procurement from the CSOs as third party monitor.</p> <p>Mitigation Measures: Project to publish and disclose to the public procurement data on opportunities, methods used and contract awards in the Project website and the website of the Public Procurement Authority.</p>
<p>3. National Market Competitiveness and Delivery Capacity</p>	<p><i>The assessment of quality for this Pillar will be based upon undermentioned parameters which measure the extent to which the chosen optimal procurement strategies for the acquisition of the project's procurement needs are established following adequate market research which has fed into the design of the project's Procurement Plan:</i></p>	<p>4</p>

	<p>1. Market Research is the basis for formulation of the project's procurement strategy for the acquisition of each substantial procurement contract and evidence of:</p> <ul style="list-style-type: none"> • comparison with alternative strategies is evident in the analysis presented in the PPS, at least for major contracts market capacity to deliver at competitive rates is present. 	<p>4</p> <p>Market research carried out for collecting price information. It does not include risk scoping of the market.</p> <p>Mitigating measures: Project to use the Project Planning Strategy developed at PDR stage.</p>
	<p>2. The identification of the project's procurement needs is done in consultation with the stakeholders and is objective without exaggeration or understatement of the procurement needs.</p>	<p>3</p> <p>The planning and budgeting process is top down. Procurement Staff do not participate in annual work planning.</p> <p>Mitigation: PIU to have an inclusive planning process and to involve procurement staff in annual work planning and budgeting process.</p>
	<p>3. National sustainable development goals of as well as relevant IFAD mainstreaming themes (in particular Youth, Gender, Environment & Climate as relevant) have been considered in procurement strategy preparation.</p>	<p>4</p> <p>The law provides environmental or social sustainability as one of the factors that can be assessed when choosing the most economically advantageous tender. However, the Manual does not describe how this should be done.</p> <p>Mitigation: Project to make reference to and apply IFAD SECAP standards.</p>
	<p>4. Procurement strategy clearly demonstrates understanding of any constraints facing private firms in their participation in public procurement competitions (e.g. difficulties in obtaining bid securities, insurance policies etc.).</p>	<p>4</p> <p>There are no mechanisms in place to address private sector constraints such as lack of knowledge on bidding procedures, access to credit and difficulties in procuring bid securities.</p> <p>Mitigation Measures: Ensure scheduling pre-bid information session to allow bidders raising any concerns regarding the respective bidding documents and procedures. Request for bid securing declarations instead of bid securities.</p>

	5.Evidence of Market Engagement with respect to advance dissemination of SECAP requirements and encouragement of the private sector to comply. Evidence of assessment of the capacity of the national market to comply including any foreseen SECAP training plans for the private sector.	3 No evidence that sensitization/training sessions have been undertaken. Mitigating measures: Project to sensitize suppliers/contractors during pre-bid conferences about procedures and requirements including clarifying any queries on SECAP requirements.
	6.Evidence that cost estimation of procurement contracts are based on market research for Goods or alternatively scientific estimation methods (like bottom-up, analogous or parametric cost estimation methods) for Works and Services.	4 Simple market research and request for information exercises undertaken at the beginning of the year. Mitigating measures: Project to undertake regular market risk scoping to get a better understanding of the market including risks and evolving trends and ensure accurate price estimates are obtained prior to preparation of AWPB and the procurement plan.
4. SECAP compliance	<i>The assessment of quality for this Pillar will be based upon undermentioned parameters which are needed to verify that SECAP standards have been implemented throughout all stages of the procurement process: definition of procurement needs/specifications, bidders' selection and qualification criteria, bid evaluation criteria and contract terms and conditions:</i>	3
	1.SECAP standards are considered in identification of project's procurement requirements and evidence that alternatives were considered.	3 The practice is fairly new and not well understood by all stakeholders. Mitigation measures: Project to ensure that SECAP requirement are included in the Technical specifications, bidders' qualifications, bidding documents and contract clauses as per the guidance in the SECAP list relevant to procurement.

	2. SECAP and SH/SEA standards are incorporated in the bidding documents especially where national SBDs are used.	4 There is a requirement for environmental assessment in major works contracts but SH/EA requirements are not included in bidding documents of the IA.
	3. SECAP standards are implemented at all stages of the procurement process: setting of bidders' selection and qualification criteria, bid evaluation criteria and contract terms and conditions including mandatory Self-Declarations by bidders.	3 The application of SECAP considerations is limited and seems superficial especially in goods and services procurement. Mitigation: Project to ensure that SECAP requirements are included in the Technical specifications, bidders' qualifications, bidding documents and contract clauses as per the guidance in the SECAP list relevant to procurement.
5. Fitness for Purpose of the project's Procurement Plan, Supervision Arrangements and status of project design and its readiness for implementation	<i>The assessment of quality of this Pillar is based upon undermentioned parameters needed to verify that the project's procurement plan takes into consideration the findings of all above assessment pillars/parameters and that the IFAD Supervision Plan is commensurate with the complexity of the project's procurement and the assessed capacity of the implementing agency and the PIU (i.e. both procurement and supervision plans are fit for purpose):</i>	6
	1. The Procurement Plan incorporates the findings of all above assessment parameters which have been arrived through the use of adequate management tools like SWOT and PESTLE analysis or equivalent methods, market research techniques and sound risk prioritization/mitigation measures.	6 A PPS has been developed for the Project during design as the basis for the selection methods and procurement arrangements for the PP.
	2. The Procurement Plan is conducive to facilitate the project's timely completion and builds-in relevant time contingencies depending on the project's readiness for implementation	6 Complies. Timelines both planned and actual included in the plan for monitoring implementation.
	3. IFAD's Procurement Supervision Plan is commensurate with the complexity of the project's procurement and the assessed capacity of the implementing agency and the PIU.	6 Complies. Two missions undertaken every year in addition to regular support by IFAD contracted personnel.

	<p style="text-align: center;">4. The provisions of the Financing Agreement and the Letter to the Borrower support the findings of the design of the project's procurement arrangements.</p>	<p style="text-align: center;">6 Complies. Procurement arrangements based on risk assessments during design.</p>
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A Six-Points Rating Scale for each parameter is to be assessed and filled-in in the rightmost column:

6 Highly Satisfactory

5 Satisfactory

4 Moderately Satisfactory

3 Moderately Un-Satisfactory

2 Un-Satisfactory

1 Highly Un-Satisfactory

