Investing in rural people

REPUBLIC OF ANGOLA

Smallholder Resilience Enhancement Project (SREP)

Project design report

Main report and appendices

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Currency equivalents

Currency Unit	=	Angolan Kwanza (AOA)
US$1.0	=	247

Weights and measures

1 kilogram	=	1000 g
1 000 kg	=	2.204 lb.
1 kilometre (km)	=	0.62 mile
1 metre	=	1.09 yards
1 square metre	=	10.76 square feet
1 acre	=	0.405 hectare
1 hectare	=	2.47 acres

Abbreviations and acronyms

AFAP	Angola Fisheries and Aquaculture Project
AfDB	African Development Bank
AOA	Angolan Kwanza
ARP	Agricultural Recovery Project
AWPB	Annual Work Plan and Budget
EDA	Estacões de Desenvolvimento Agrário (IDA office at municipal level)
EIRR	Economic Internal Rate of Return
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
FAO	Food and Agriculture Organization of the United Nations
FFS	Farmer Field School
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
GNI	Gross National Income
GoA	Government of Angola
HDI	Human Development Index
HDR	Human Development Report
IDA	Instituto de Desenvolvimento Agrário (Agricultural Development Institute)
IFAD	International Fund for Agricultural Development
MINAGRIF	Ministry of Agriculture and Forestry
MINFAMU	Ministry of Family Affairs and for the Promotion of Women
MOSAP	Market Oriented Smallholder Agriculture Project
NPV	Net Present Value
PDO	Project Development Objective
PGC	Provincial Governance Committee
PIF	Portfolio Implementation Facility
PIM	Project Implementation Manual
PIU	Project Implementation Unit
PPSC	Provincial Project Steering Committee
PSC	Project Steering Committee
SADCP	Smallholder Agriculture Development and Commercialization Project
SECAP	Social Environmental and Climate Assessment Procedures
SCU	Single Coordination Unit
SLM	Sustainable Land Management
SREP	Smallholder Resilience Enhancement Project

Map of the SREP area

Executive Summary[1]

Background

The Smallholder Resilience Enhancement Project (SREP) covers two distinct geographical regions and agro-ecological zones in the north and the south of Angola to ensure a corridor of synergistic and complementary agriculture development investments. In the north, SREP will improve smallholders' productivity and production and link them to markets, replicating the successful approach of the Market Oriented Smallholder Agriculture Project (MOSAP) in provinces adjacent to the area covered by the Smallholder Agriculture and Market Access Project (SAMAP). In the south, SREP will facilitate smallholders' transition from recovery (following the 2012-2016 droughts) to longer-term resilience. SREP will also aim to consolidate gains made under the Agriculture Recovery Project (ARP). By replicating the implementation modalities and management systems of these three on-going projects, SREP ensures simplicity and ease of execution, in recognition of the limited development capacity in Angola. The Government of Angola (GoA) is cognizant of this challenge and is fully supportive of this approach. Coverage of both the northern and southern provinces will broaden IFAD's presence in the north as well as consolidate presence in the south, by creating a corridor of agricultural investment with opportunities to scale up the approaches and proven 'good agricultural practices' of other donor-funded projects as well as provide access to markets for smallholder farmers.

Rationale

SREP is a timely intervention, given the current national focus on diversifying the Angolan economy, from a strong focus on the oil sector, towards a sustainable growth path, premised on the agriculture sector and agribusiness. SREP is designed to address some critical constraints to agricultural development in Angola,. The north and the south represent two distinct agro-ecosystems and socio-economic conditions for family farmers (see appendices, 2, 12 and 13). Large areas of the northern provinces are characterized by undulating to hilly topography and a cassava-based food cropping system, while the southern provinces are generally lowlands with a mixed agro-pastoral system. The north has relatively good climatic and soil quality conditions for agricultural production, while the south suffers from arid and semiarid conditions with high vulnerability to climate risks. As a result, the southern region relies on food from other regions in Angola. Production improvements in the north and livelihoods diversification in the south will be beneficial for both regions. Potential shifts in crop suitability and the need for agro-ecological based adaptation add to the interdependency among the regions. In addition, the overall baseline situation for smallholders in both regions have similarities in terms of food and nutrition insecurity, low agricultural productivity and vulnerability to climate change risks, albeit higher in the south than in the north. The SREP design addresses those key issues both in the north and in the south with intervention strategies derived from a common theory of change that takes into account the two different contexts. This is shown in Figure 1.

SREP also takes into account the recommendation of the 2018 CSPE on the need to make capacity building a key pillar of IFAD's support to theGoA. The project will therefore seek to increase institutional capacity at individual and national levels, while upgrading smallholder agricultural production and fostering resilience in the project areas.

In the north, SREP will help small family farmers transition from mainly subsistence to semi-commercial/commercial farming. Change will be achieved through: a) strengthening institutional capacities for improved delivery of advisory and other support services tailored to family farmers' needs and conditions; b) roll out of Farmer Field Schools (FFS) and other extension approaches to

[1]Mission composition: Ms Rikke Olivera, IFAD Senior Technical Specialist Natural Resources Management – Project Technical Lead Adviser for SREP; Ms Paxina Chileshe, IFAD Adaptation Specialist; Mr David Kahan, Farming Systems Consultant and Team Leader; Davis Atugonza, – Economist, Consultant; Mr. Alaudio Chingotuane – Financial Management Consultant, Ms Maureen , Gender, Targeting and M&E Consultant, Marian Mr Antonio Abreu, Environmentalist, Consultant; Ms. Marian Odenigbo, Nutrition Specialist; Mr. Jonathan Agwe, Inclusive Rural Financial Services Specialist; Mr Waseem Khan, Procurement Specialist; and Ms Abla Benhammouche, former Country Director, led the mission. Final Design Mission Composition: Ms Abla Benhammouche; Mr. David Kahan; Mr. Davis Atugonza; Mr. Antonio Abreu; Mr. Guy Kemtsop and Mr. Custodio Mucavele.

support adoption of good agricultural practices for improved soil and water management and increased productivity; c) training in nutrition and healthy family diets; d) financial literacy and provision of technical assistance to develop bankable business plans; and e) investments in rural infrastructure and the provision of matching-grant funding. In the south, SREP will contribute to GoA efforts to enhance resilience among rural households and will align with the strategic priorities laid out in the drought recovery framework. The GoA recovery planning also emphasises the need to focus on promoting sustainable farming practices and agricultural technologies adapted to local conditions; improving information systems for food security and animal health surveillance; introducing proper rangeland management systems; and promoting income diversification activities. SREP interventions will contribute to most of these thematic areas. In the northern areas, SREP will also be proactive in supporting smallholders to adapt to the potential long-term negative consequences of climate change.

Project Area

SREP project area will cover thirty five municipalities within the seven provinces; Bengo, Zaire, Uige, and Cuanza Norte in the north, and Benguela, Cunene and Namibe in the south.

Target Group

The project will target a total of 218,000 households (just over 1 million people), 65,400 households in the south and 152,000 households in the north.The core SREP target group will primarily comprise of low-income smallholder households, whichare members of Cooperatives and Associations in the north and FFSs in the south, established during past emergency and recovery projects. Support will be provided to strengthen already established FFSs so that the beneficiary households can transition from recovery to long-term resilience and sustainable development.

Project Goal and Development Objective

The *Project goal* is to “contribute to improved food and nutrition security of targeted communities”. This underlines the importance of ensuring food and nutrition security as a prerequisite to enable them to participate in development activities. The *Project’s Development Objective* (PDO) is “to increase production and resilience of target farm households”. This is to be achieved through strengthening cooperatives and associations, establishing FFSs and agricultural and livestock development supported by capacity building and construction of basic supporting infrastructure.

Project Components

SREP’s PDO will be achieved through the effective implementation of two technical components focusing on strengthening the institutional capacity & rural public infrastructure to support climate and nutrition resilient smallholder production (Component 1) and strengthening family farming capacity and investment (Component 2). Each of these components consist, in turn, of two technical subcomponents, supported by a cross-cutting component that will implement the project through effective coordination and management. Under Component 1: Institutional Capacity Building, the Subcomponents are: Strengthening capacity for improved services (Subcomponent 1.1), and Investing in public rural infrastructure (Subcomponent 1.2). Under Component 2: Family farming strengthening and investment, the Subcomponents are: Strengthening capacity for family farming (Subcomponent 2.1) and Investment in family farming (Subcomponent 2.2). SREP will be managed by a Coordination and Management Unit under the Institute for Agricultural Development (IDA). The Project Design is illustrated in Figure 2.

Component 1: Institutional capacity building& rural infrastructure(US$89.4 million)

Subcomponent 1.1: Strengthening capacity for improved services. The objective of this subcomponent is to strengthen the capacity and skills of government agricultural extension specialists at provincial and municipal level, and national NGOs supporting the development of family farming and their producer groups. This subcomponent will focus on building capacities of extension and service provider staff at the provincial and local levels to ensure effective implementation of subcomponents 1.2 and 2.2. It will include five major interrelated activities intended to improve the

agriculture extension service delivery and strengthen the human resource capacity of advisory and service providers in climate change, environmental management, nutrition and livestock health services. The expected outcome is strengthened institutional capacity to deliver services to enhance food security, productivity and resilience

Subcomponent 1.2: Investing in public rural infrastructure for resilience and market access. The objective of this subcomponent is to invest in construction of rural infrastructure and land development to enhance climate resilience and promote better production and marketing conditions. Different types of investments will be supported, including: a) the construction and rehabilitation of feeder roads, b) construction of market facilities, c) water resources development including small scale irrigation, and d) sustainable land management. The expected outcome is rural infrastructure to build resilience and enhance productivity and market access.

Component 2: Family farming strengthening and investment(US$38.3 million)

Subcomponent 2.1: Strengthening capacity for family farming. The objective of this subcomponent is to strengthen the capacity and skills of family farmers, through support by government agricultural extension workers and national NGOs to the development of family farming.The FFS methodology will be used as the main instrument for reaching target households within the community. The skills and capacities required at field level will be strengthened to ensure that the necessary support services to communities and households will be readily available to help them become more resilient to climate-related shocks. This subcomponent will provide the essential capacity building required to ensure effective implementation of subcomponent 2.2.The outcome will be the acquisition of skills and technologies among family farmers for improved productivity, market access and increased resilience.

Sub-component 2.2:Investment in family farming. The objective of this subcomponent is to improve agricultural productivity, increase value addition, link farmers to markets and increase incomes and livelihood opportunities for family farmers. Agricultural productivity will be enhanced under rain-fed crop and irrigated systems and livelihoods diversified accompanied by the capacity building efforts. Poor dietary diversity will be addressed by increasing the availability and consumption of nutritious and diverse foods and enhancing income to ensure healthy eating and improved family diets. The expected outcome is improved profitability of farm and non-farm income generating activities to improve access to food.

Component 3: Project Coordination and Management (US$22.3 million)

The objective of this component is to strengthen SREP's overall coordination, monitoring and evaluation through establishment of a Project Implementation Unit (PIU) supported by specialised support services from the Single Coordination Unit (SCU) at central level. The SCU will be responsible for coordinating, monitoring and implementation of SREPactivities, including: a) financial management and reporting; b) coordination of procurement for goods and services; c) preparation and coordination of SREP's Annual Work Plans and Budgets (AWPBs); and d) monitoring and evaluation and knowledge management. The SCU will be supported by a Portfolio Implementation Facility (PIF), set up as a technical assistance unit with the purpose of sourcing International/Regional Technical Assistance to provide on-the-job training to Angolan counterparts. The PIF will support national counterparts through training, mentoring and establishing portfolio management systems. SREP will contribute to the SCU operational costs, procurement of office equipment, office consumables, vehicles and the associated equipment maintenance costs. This Component will ensure that the Project is implemented correctly, on time, and in accordance with the Project Implementation Manual (PIM) and the Financing Agreement.

Social, Environmental and Climate Assessment Procedures (SECAP)

The environmental and social category assigned to SREP is B. It will support the following activities: agriculture intensification in non-sensitive areas; integrated pest management; credit for the purchase of pesticides/other agrochemicals and training in their safe use and Sustainable Land Management (SLM) practices. Any localised environmental impacts resulting from the agricultural production activities and construction of livelihood-supporting infrastructure will be managed and minimised through the implementation of best practices and site-specific Environmental and Social Management

Plans (ESMPs). Feeder road rehabilitation, small-scale irrigation schemes rehabilitation and market infrastructure investments will be developed and operated under adequate environmental and social standards.

The climate risk classification for the SREP is high. The northern provinces are rain-fed crop areas with significant annual variations in rainfall and resultant fluctuations in production. The southern provinces have been severely affected by droughts and floods (e.g. La Niña event in 2016/2017, with flooding in some parts of the region). In both areas, farmers use traditional cropping methods, with limited awareness of soil or water conservation, replacement of soil nutrients, choice of plant varieties, irrigation, or other climate-adaptive technologies. A detailed climate vulnerability analysis will be conducted to further inform the adaptation measures that SREP is expected to bring, including improvements in cropping technology, which will increase farmers' resilience to climate variability and climate change.

Approach

The FFS is increasingly regarded as the principal extension approach in Angola and will be the main instrument to promote resilience and sustainable agricultural development. There have been discussions at Federal and provincial levels for the FFS to be institutionalised and provincial technical officers are familiar with the approach. Consequently, support will be provided to strengthen FFSs set up in the south, as well as to establish new schools in all areas. Focus on the northern provinces will venture into new territory, as previous donor support has not been available in most of the target areas.Food insecure municipalities with potential for agricultural development will be targeted. Partners and service providers will play a critical role in implementation, which has been seen to be a crucial factor in the success of other projects and is prevalent in all projects in the country.

Organisational Framework

The Ministry of Agriculture and Forestry (MINAGRIF) will be the lead executing agency and will work closely with the other line ministries and partners whose mandates have a direct bearing on the achievement of the Project objectives. The Project delivery systems will be integrated into the decentralised government organisational and operational structures that cascade from the national level to communal level. IDA (*Instituto de Desenvolvimento Agrário*) will be charged with the responsibility of administration and coordination of the Project. MINAGRIF will be supported by a Project Steering Committee(PSC) as an oversight body, chaired by the Minister of Agriculture or his nominee, and composed of membership from institutions with direct relevance to the achievement of SREP's objectives.

Project Costs and Financing

Total SREP costs, including price contingencies, duties and taxes, are estimated at about USD150 million over the six-year implementation period. IFAD will fund the Project through a loan of around USD 43 million on ordinary terms. The IFAD loan will be divided into two tranches; an initial funding of USD29.755 million under IFAD 11. A second tranche of USD21.755 million will be allocated conditional to the availability under PBAS allocation for IFAD 12.

GoA will finance taxes, duties and contributions to extension infrastructure amounting to a total of USD 10 million, representing about 6.7% of total costs. The estimate of taxes and duties is based on prevailing rates at the time of design. In conformity with the principle that no taxes or duties will be financed out of the proceeds of the IFAD Loan/Grant, any changes in the rates of taxes and duties would have to be met by GoA. Beneficiaries will contribute USD 6.5 million, representing about 4.3% of Project costs, and will consist mainly of in-kind contribution (labour[2]). BADEA will contribute about USD 40 million (26.7%) and Agence Française de Développement (AFD) a further USD 42 million (28%).

[2]https://tradingeconomics.com/angola/minimum-wages

Project Benefits

Financial benefits will be in the form of increased cash incomes of beneficiary households. Social benefits will include a reduction in poverty rates, with special measures taken to ensure inclusion of disadvantaged groups, and increased food and nutrition security. Environmental benefits will consist of reduced land degradation and increased carbon sequestration of rangelands in the south. Due to limited data availability, only the increased returns to households are taken into account.

Economic Internal Rate of Return and Net Present Value

The Economic Internal Rate of Return (EIRR) of the Project is estimated at 26% (base case), which is above the opportunity cost of capital in Angola, estimated at 9.4%.It is emphasised that this EIRR is a minimum, based on conservative estimates. This is a satisfactory result given the resilience focus of the Project, logistic and climatic difficulties in some project areas, and the country's overall macroeconomic situation. It is based on the assumption that adoption is limited to 70% of target farmers. In case of higher adoption rates, the EIRR will increase. The Net Present Value (NPV) is USD 91.66 million over a 20-year period.

Sensitivity Analysis

The EIRR and NPV were subject to sensitivity analyses, in order to measure variations due to unforeseen factors. Variations include: 10, 20 and 50% cost over-run; 10 and 20% increase in benefits; 10 to 50% benefit decrease; and 1 to 2 years of delay in the implementation. The analysis indicates a relatively strong resilience to limited increases of costs and reductions of benefits as well as benefit delays.

Figure 1: Problem Tree Analysis and Theory of Change

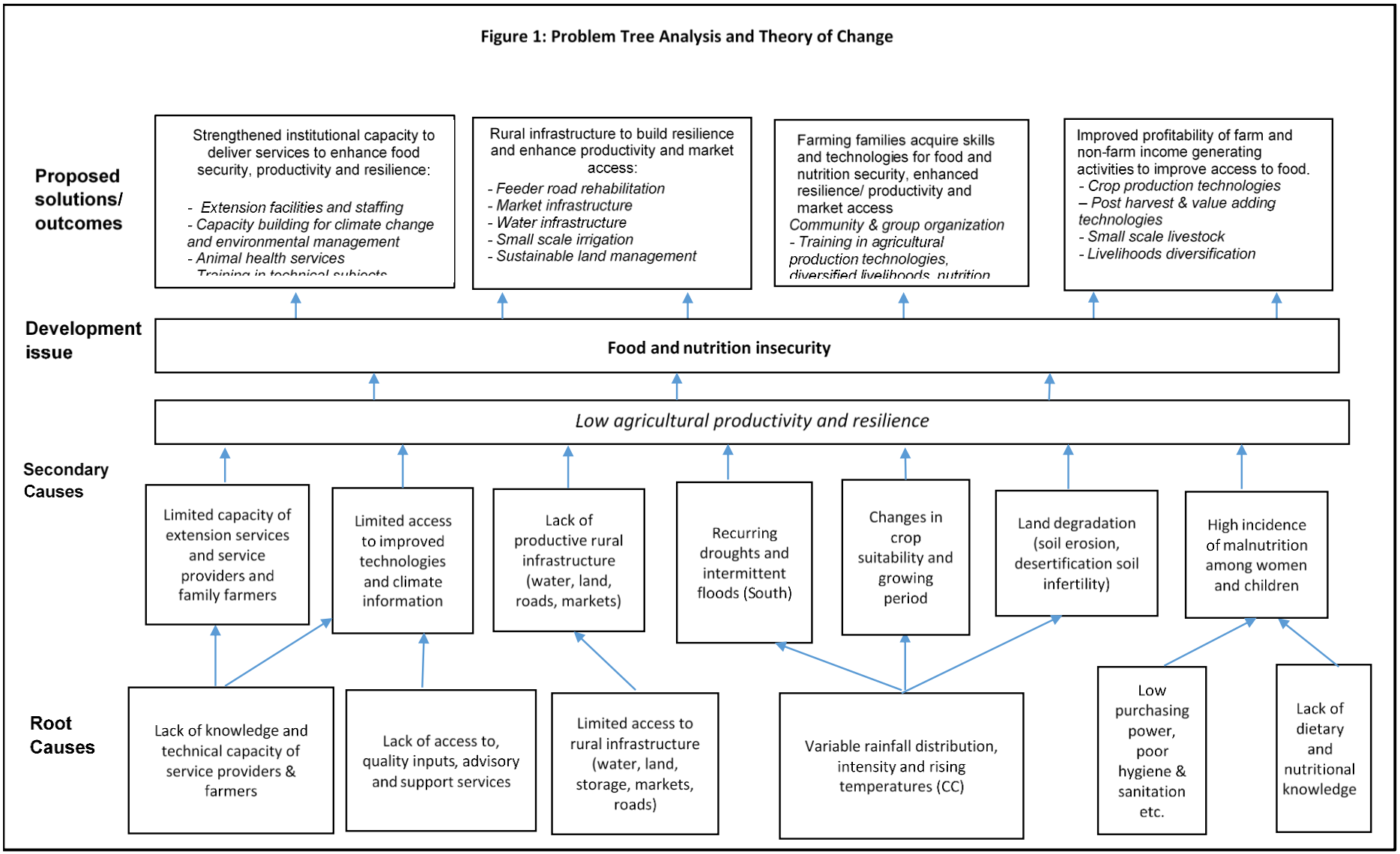
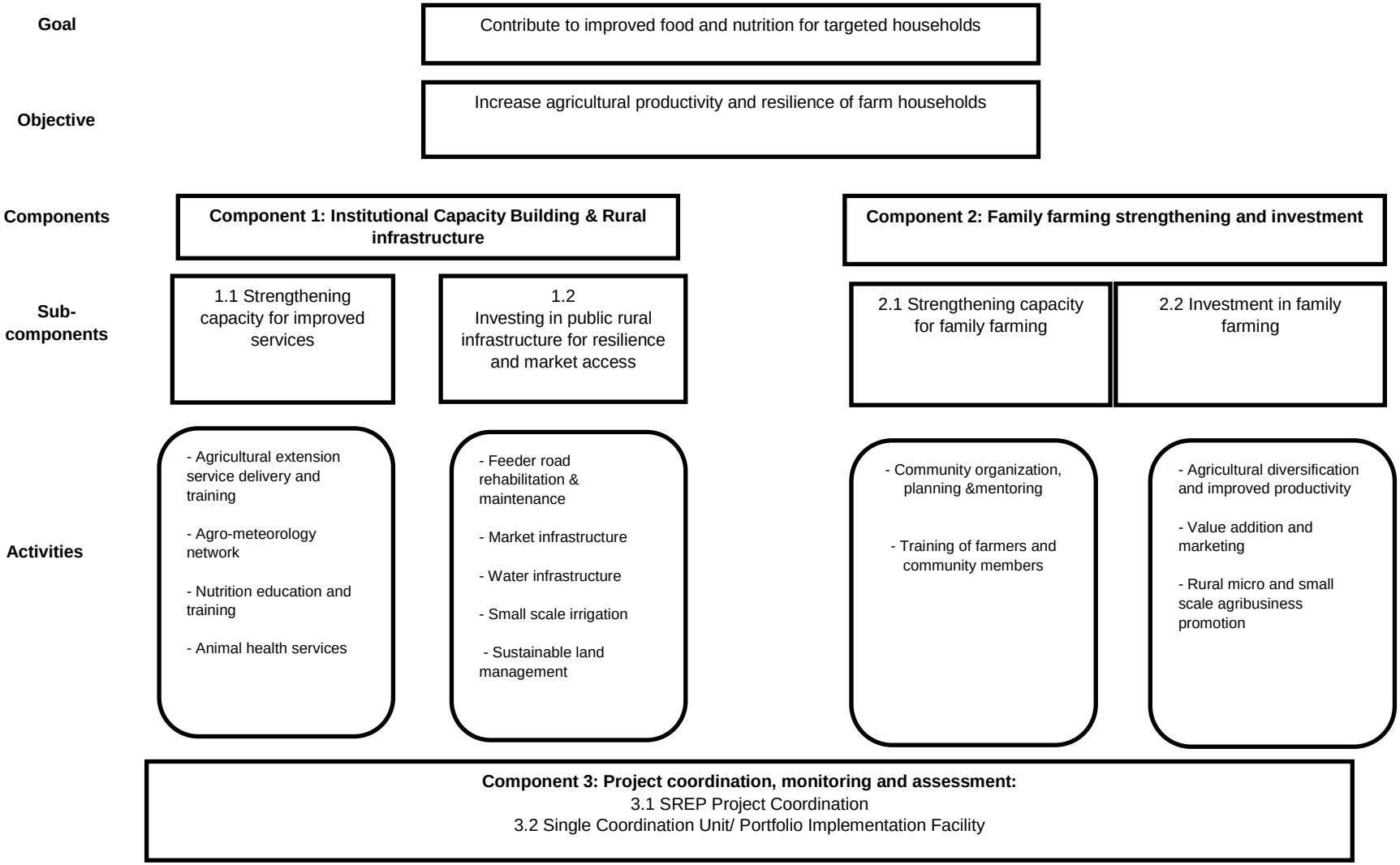


Figure 2: Project Chart



Logical Framework: SREP Project

Results hierarchy	Indicators				Means of verification			Assumptions (A)/ Risks (R)
	Name	Baseline	Mid-term	End target	Source	Frequency	Responsibility	
Outreach	Number of beneficiaries reached (HH) (with women comprising at least 40% and youth 25%)	0	100,000	218,000	▪ Reference studies and HH surveys.	▪ Baseline ▪ MTR ▪ End-line	▪ PIU/ SCU	(A) Extreme climate change shocks do not occur
Goal: Contribute to improved household food and nutrition security of targeted communities	No. of HH reporting improved food security as measured by Food Insecurity Experience Scale (FIES)[3], (data disaggregated by gender of household heads) and	0	42,000	152,600	▪ Reference studies and HH surveys	▪ Baseline ▪ MTR ▪ End-line	▪ PIU/ SCU	(A).Extreme climate change shocks do not occur
	No. of women of reproductive age reporting good dietary diversity (MDD-W)[4]	TBD	25,000	61,000	Household surveys	▪ Baseline ▪ MTR ▪ End-line	▪ PIU/ SCU	A).Extreme climate change shocks do not occur
Development objective: Increased productivity and resilience of targeted households	HH report a 30% increase in agriculture productivity for selected food crops	TBD	40,000	112,000	▪ Project M&E system ▪ Production and yields survey ▪ Specific technical and activity report.	▪ Annual	▪ PIU/ SCU	A).Extreme climate change shocks do not occur
	No. of HH report a > 50% increase in resilience score[5](data disaggregated by gender of household heads)	TBD	30,000	104,600	▪ Specific technical and project activity reports	▪ Annual	▪ PIU/ SCU	(R).population increases may jeopardize sustainability of management systems.

[3]FIES consists of eight questions regarding people's access to adequate food: *1) You were worried you would not have enough food to eat?; 2) You were unable to eat healthy and nutritious food?; 3) You ate only a few kinds of foods?; 4) You had to skip a meal?; 5) You ate less than you thought you should?; 6) Your household ran out of food?; 7) You were hungry but did not eat?; 8) You went without eating for a whole day?*

[4] MDD-W: Minimum dietary diversity indicator for women of reproductive age (15-49 years)is a diet quality indicator associated with micronutrient adequacy of diets

[5]Resilience of beneficiary household will be monitored using a resilience scorecard presented in annex 4 to appendix 6.

Results hierarchy	Indicators				Means of verification			Assumptions (A)/ Risks (R)
	Name	Baseline	Mid-term	End target	Source	Frequency	Responsibility	
Outcome 1: : Strengthened institutional capacity to deliver services to enhance food security, productivity and resilience	No. of family farmers reporting regular use of advisory and support services (disaggregated by gender and age)	0	40,000	125,000	▪ Specific technical and project activity report	Annual	▪ PIU/ SCU	(R).GoA was unable to recruit the additional extension staff needed to ensure effective project delivery. .
	No. of family farmers reporting use of climate information services (disaggregated by gender and age)	0	20,000	49,000	Specific technical and project activity reports	Annual	▪ PIU/ SCU	
Outputs: 1.1 Technical, organizational and managerial competencies of advisory and support service staff improved	No. of government-employed staff participating in training programmes run by the project during the period under review. (disaggregated by gender)	TBD	1,500	3,0000	Project M&E system	Annual	▪ PIU/ SCU	
Outcome 2: Rural infrastructure to build resilience and enhance productivity and market access	No. of households with improved access to water, land and road infrastructure	TBD	15,000	40,000	Project M&E system	Annual	▪ PIU/ SCU	A).Extreme climate change shocks do not occur
Outputs 2.1 Identification, prioritization construction/ rehabilitation of feeder roads	No. of kilometer of rural roads constructed and/ or rehabilitated	0	200	510	Contractor reports	Bi-annual	▪ PIU/ SCU	
2.2 Land sustainably managed under climate resilient practices	No. of hectares under SLM (including rangelands)	TBD	10,000	21,000	Specific technical and project activity reports	▪ Annual	▪ PIU/ SCU	(A)Project resources are mobilised accordingly
2.3 Water infrastructure managed under climate resilient practices	No. of households reporting improved access to water resources for productive and domestic use (data disaggregated by gender of household heads)	TBD	10,000	30,000	Specific technical and project activity reports	Bi-annual	▪ PIU/ SCU	A).Extreme climate change shocks do not occur
Outcome 3: Farming families acquire skills and technologies for food and nutrition security, enhanced resilience/ productivity and market access	No. of HH applying climate resilient technologies and practices. (data disaggregated by gender)	TBD	30,000	80,000	Specific technical and project activity reports	Bi-annual	▪ PIU/ SCU	
Outputs: 3.1 Family farmers, technical, organizational and managerial competencies Improved	No. of farmers reporting the use of knowledge acquired through FFS training (disaggregated by gender and age)	0	40,000	95,000	▪ Specific technical and project activity reports	Bi annual	▪ PIU/ SCU	
Outcome 4 Improved profitability of farm and non-farm income	No. of HH reporting 30% increase in percentage of agriculture output sold	TBD	30000	80,000	▪ Specific technical and project	▪ Annual	▪ PIU/ SCU	(R)Cultural factors could hinder the

Results hierarchy	Indicators				Means of verification			Assumptions (A)/ Risks (R)
	Name	Baseline	Mid-term	End target	Source	Frequency	Responsibility	
generating activities to improve access to food.	in market				activity reports			long-term uptake of GAP technologies
Outputs: 4.1 Family farmers are investing in improved production and marketing	No of households reporting use of production inputs and or technological practices	TBD	45,000	120,000	Specific technical and project activity reports	Bi- annual	▪ PIU/ SCU	

(1.2.2 etc.) refers to IFAD`s core indicators matrix. EB 2017/120/R.7/Rev.1

**Up to 15 indicators including a few optional RIMS indicators. In addition to these, RIMS mandatory indicators must be added. **The distribution of indicators is illustrative ***Intermediate targets for the Goal and Outputs are optional.*

I. Strategic context and rationale

A. Country and rural development context

1. The Government of Angola (GoA), together with its national and international partners, has made substantial progress since 2002, which marked the end of nearly three decades of civil war, during which time much of the country's economy collapsed, infrastructure was destroyed and institutions weakened. Progress has involved investment programmes, aimed at ensuring order and security, revitalising the economy, restoring social services, rehabilitating infrastructure and addressing the threat of climate change.

2. Since 2002, Angola has enjoyed a period of relative peace and political stability. Between 2002 and 2014, GDP per capita increased from US$ 2,900 to US$ 6,800, largely driven by oil production. In 2014, the oil sector represented 35% of GDP and accounted for 95% of exports. Since 2016, the decline of oil prices and a decrease of 3.3% in oil production between 2015 and 2016, resulted in a significant slowdown in GDP growth from 8.5% in 2012[6].to 1.1% in 2016. The decline in oil revenues prompted the GoA to accelerate efforts to diversify the economy, with a stronger focus on agriculture, industry and services. This stronger emphasis on agriculture aims to increase production and reduce food imports. Angola's institutional capacity, however, has not been restored since the return of peace and bureaucratic hurdles hinder private sector growth. The GoA is committed to facilitating private sector development and is encouraging financial institutions to support the agriculture sector.

3. **Food Security and Nutrition**. Angola has made significant progress over the last decade in reducing food insecurity and under-nutrition. Recent data indicates that the prevalence of undernourishment dropped from 32.1% in 2004-2006 to 14% in 2014-2016. Over the same period, the number of undernourished people dropped from 5.8 to 3.5 million, despite the growth in population[7]. However, malnutrition remains a public health concern with a stunting rate of 38%, and 65% anaemia prevalence among children aged 6-59 months. Higher stunting prevalence was recorded in rural populations (46%) compared to urban areas (32%). Poor nutrition is associated with poverty, education status of mothers, as well as limited access to drinking water and poor hygiene and sanitation practices. These drivers of malnutrition lead to inadequate calorie and nutrient intake of mothers and their children.

4. **Poverty and inequality**. Performance related to social indicators have been mixed. Since 2002, good progress has been made in poverty reduction, primary education, and gender equality, but other social indicators are weak.The poverty rate declined from 62% in 2001 to about 37% in 2009[8]. This was a major achievement, but much more needs to be done under the shared prosperity agenda. The rural poverty rate is 58%, in contrast with urban poverty rate of 30%. In the capital (population five million), the poverty rate is only about 9%. The Gini-coefficient in 2013 was 42.7[9]. The average life expectancy is 51.1 years (HDR 2017).The Human Development Index (HDI) places Angola close to the average value for Low Human Development Countries, but above the average for Sub-Saharan Africa. The HDI for Angola increased from 0.391 in 2000 to 0.581 in 2017, with the country ranked 150 out of 188 (HDR,2018).

5. **Agriculture and the smallholder sector.** Angola has an estimated 58 million ha of arable land, of which less than 10 per cent is estimated to be under cultivation with a minimal area under irrigation (2017). The country used to be a major agricultural exporter, but currently a large share of the food consumed is imported, although this figure is declining. The shift from a net exporter to net importer was due in part to the destruction of the agricultural production and marketing infrastructure during the civil war, and in part to the lack of competitiveness against imports.

[6] General National Budget 2016
[7] FAO, IFAD, UNICEF, WFP and WHO. 2017. The State of Food Security and Nutrition in the World 2017. Building resilience for peace and food security. Rome, FAO.
[8] Angola 2014", Instituto Nacional de Estatística.
[9] World Bank Indicators

6. Although agriculture contributes only 10% of GDP[10], some 44% of the employed population works in the sector, while around 46% of households are engaged in some form of agricultural activity and 6% in fishing (2014 census). The rural poor depend almost exclusively on smallholder family farming for their livelihoods. These farms are largely subsistence-based, characterised by low yields, low prices, limited sales and low returns to labour. Improving smallholder agricultural production, productivity and commercialisation are hence critical to rural poverty reduction. The northern provinces in Angola are characterized by cassava-based mixed food cropping systems, with cultivated areas of between 1.5 hectares closer to the coast, and 2.5 hectares further inland. Cassava is the most important crop grown in the north but other crops include peanuts, beans, bananas, maize and sweet potatoes, all of which are part of the local diet. The south is largely agro-pastoral, with livestock contributing significantly to the livelihood of rural households. Some 80% of farmers are subsistence smallholders growing maize, millet and sorghum, at low levels of productivity.

7. After nearly three decades of civil war, much of Angola's economy had collapsed and its agricultural institutions weakened. Since the signing of the peace Accords, the GoA has made progress in re-establishing the foundation for agricultural extension but more is needed to reach the objective set of one extension worker for three communes. This is particularly so in those areas of the country where donor support has been absent. Agricultural extension services are provided by IDA, and advisory services are public sector dominated. At provincial, municipality and commune level, there is a dearth of extension staff and supporting facilities (offices, transport) to enable extension workers to perform effectively. A major concern for GoA is to ensure the provision of adequate services for small family farmers.

8. **Land tenure and access to land.** In Angola, all land belongs to the State, which determines its final use. In 2004, a Land Law was passed in order to preserve the rights of the rural communities, by taking into account the customary land use systems that prevail in the different parts of the country[11]. The law was expected to provide security of tenure for investments in land improvement, e.g. small-scale irrigation managed by community-based groups and associations. In terms of State ownership, agricultural land is regulated upon a private rights basis while natural resources form part of the public right. The law foresees that land for private agricultural investment would be regulated through perpetual land use rights, sold by auction from the State to private actors. In this way, land use rights are transferable. At the same time, the Land Law subjects those with informal rights to eviction if they fail to apply for a concession in a timely manner.

9. Although in Angola there is no straightforward competition for scarce land, due to the still very low population density, the weaknesses in the land legislation framework and in titling processes have resulted in conflicting interests in parts of the country where encroachment occurs, especially amongst those communities with limited capacity to defend their rights. As part of government policy, cooperative members can receive rights to the communal land managed by the cooperative. A single title is granted to the cooperative as a group, within which land transfers can take place between members on an informal basis. Titles can be given by the Ministry of Agriculture and Forestry (MINAGRIF), and at provincial level for areas of land up to 100 hectares.

10. Formal land administration in the country is rudimentary or non-existent and institutional capacity is lacking at all levels, especially outside major urban centres. The infrastructure needed for formal dispute resolution and promoting the rule of law is weak. Informal dispute resolution does occur within communities with village elders and other leaders adjudicating and mediating conflicts. While these traditional authorities are often successful in dispute resolution, they are not always doing so in accordance with formal law, but rather they are following tradition. There does not appear to be a significant formal (local or provincial) government judicial dispute resolution mechanism available. There are courts at the provincial level, but are under-staffed and underfunded, and not accessible to most citizens.

[10]Average calculated based on available national data from 2006 to 2012. Source: Government of Angola (2016) Nota de Imprensa N. 02 – Contas Nacionais Provisórias 2014 e Preliminares 2015, Instituto Nacional de Estatística

[11]These include: residential, traditional shifting agriculture and transhumant grazing, forestry, access to water and communication ways use.

11. FAO has, for decades, supported the GoA through the *Angola Land Programme* in the development of the country's land tenure management framework, which takes into account the historical occupancy and uses by local communities. Over the past 10 years, FAO and GoA, in collaboration with national NGOs and CSOs (including Global Vision Angola) have piloted participatory land-use mapping, planning and delimitation processes with rural communities and supported them in obtaining land titles in the centre and south of the country (Huila, Benguela, Bié and Huambo provinces). As a result, 20,000 ha of land used by local communities have been titled and a manual for participatory land-use mapping, planning and land titling has been developed which is now being taken up by the World Bank-supported project. A draft study of Angola's legal framework has been prepared for further discussion, which looks at constraints and needed reforms for implementing the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests in the Context of National Food Security (VGGT)* in Angola.

12. **Gender.** Almost a quarter (23%) of agricultural households are headed by women, who are responsible for 70% of traditional subsistence agriculture and 24% of commercial agriculture. In general, women are not entitled to own property on equal terms with men and their right to own land often depends on their marital status. Cumbersome administrative procedures are also a constraint.

13. **Youth.** The government defines youth as people aged 15 to 35, which represents 32.4% of the population. School completion rates decrease after the primary level and progressively drop along the education pathway. Youth unemployment is 46% against a general unemployment rate of 24%, and rural youth face a major challenge in seeking alternatives to subsistence farming, while having limited employment skills. Migration levels are highest for youth within the 25-35 year age group (24.5%). Poverty, however, is lower among the 15–35 year olds than any other age group. A significant number of households are youth-headed.

14. **Climate change.** Agriculture, particularly in the south, is increasingly vulnerable to climate change and extreme climatic events, such as droughts (e.g. 2012-16) and floods (e.g. 2017), rrecurrent cycles of which have affected the southern provinces of Angola over the last decade. In the northern provinces, extreme heavy rain damages crops and affects living conditions, as well as homes and infrastructure. In the south, consecutive drought years have stretched household coping mechanisms to their limit. Most rural communities have lost their seeds and food stocks and as a result their vulnerability to climate shocks has increased. The 2015-2016 El Niño drought led to harvest failures, with crop losses of up to 40% in parts of the south. In 2017, approximately 1.25 million people, located mostly in the southern provinces of Benguela, Cuando Cubango, Cunene, Huila, Kwanza Sul, and Namibe, were food insecure. Projections from global climate models suggest a medium-strong increase in temperature with average temperatures increasing by 1.2° - 3.2°C by 2060. Total rainfall through "heavy events" is projected to increase (UNDP, 2008), with an expected increase in the frequency of floods. For the end of the century a warming in the range of 1.4°C to 4.6°C (tropical regions) and 1.6°C to 5.1°C (semi-arid regions) is likely (compared to 1971 to 2000). Furthermore, a strong increase in the duration of heat waves, as well as a strong decrease in cold spell length, is projected (Climate Fact Sheet, 2018).In 2015, following prolonged dry spells crop yield losses were estimated at 75% in Cunene, Huila and Namibe provinces (PDNA, 2015). Climate change also affects, albeit less so, the more humid northern provinces, with increased temperatures, lower rainfall and a shorter growing season predicted.

15. A climate risk analysis, undertaken by the Africa Climate and Development Initiative, explained the effects of climate change and its particular effect on cereals. A noticeable consequence is the reduced length of growing seasons. The Intergovernmental Panel on Climate Change (IPCC) has warned that decreases in crop yields of 10%-25% and more may be widespread by 2050. Though the southern part of Angola is more affected by climatic events such as droughts and intermittent floods, the northern regions also experience adverse impacts from late onset and early cessation of rains and prolonged dry spells. Rising temperatures are also affecting agricultural productivity. Climate models predict Angola will experience more extreme weather events, an expansion of arid and semi-arid regions, seasonal shifts in rainfall, localised floods, increased wildfires, sea level rise, increased rainfall in the northern parts of the country, changes in river flows and changes in sea and lake temperatures (NAPA). SREP will support communities to cope with extreme climatic events such as droughts, prolonged dry spells and increasing rainfall variability. See Appendix 12 for more detailed analysis.

16. **Land degradation.** Angola is rich in natural resources, although land degradation and soil fertility decline is becoming a more acute problem, especially in the south. Land degradation is mainly due to unsustainable agricultural practices, the over-grazing of rangelands and deforestation. The vagaries of the weather and inadequate land and water management have accentuated soil erosion and land degradation, which has resulted in increased sedimentation in streams and water points (which are crucial for the agro-pastoral system), a decrease in soil depth and fertility, diminishing soil organic matter and a reduction in its water and nutrient holding capacity. Cattle keepers in the south require more land to sustain their herds due to drier conditions and rangeland degradation. Deforestation rates over the last three decades have been high, even though movement of people from rural to urban areas has allowed for forest recovery in areas previously under cultivation. The primary causes of deforestation are charcoal production, land clearing for agriculture and uncontrolled fire. The annual rate of deforestation over 2005-10 was around 0.21% (FAO, 2013).

17. **Market infrastructure and demand**: Market demand is high for most food crops and opportunities exist for expanding smallholders' production. However, market outlets in rural areas are insufficient and marketing systems that were severely disrupted during the civil war are yet to be strengthened. Only a limited part of agricultural production reaches the market due to poorly developed infrastructure, particularly farm-to market roads and electricity.

18. **Rural finance**: The financial sector is competitive, but also highly concentrated, with five banks holding over 75% of the market share. The products and services offered are mostly focused on traditional mass-market banking products and loans are concentrated in a few sectors in Luanda province. The banking system is not accessible to a majority of the population and credit is largely concentrated in urban areas. A few banks have microfinance portfolios, with loans mostly extended under government or donor-supported programmes. The share of agriculture in the loan portfolio of banks is minimal, mainly short term and mostly benefiting commercial farmers. The family farming sector, which cannot present land titles as collateral (among other challenges), is largely excluded from financial services.

19. In recent years, GoA and the central bank, Banco Nacional de Angola (BNA), have focused on economic diversification, deepening financial inclusion, developing rural financial systems, microfinance and financing agriculture and agri-business. However, to date the financial sector is yet to give due attention to these emerging areas, and there is still a long way to go to achieve a diversified economy with more inclusive, sustainable and robust growth. Policies need to be refocused and the systems re-engineered to foster structural transformation. Both public and private institutions, including the banking sector, have to work closely to increase production and productivity of smallholder farmers by facilitating access to finance, technology and markets.

20. **National development policies and strategies**. Angola has recently taken bold steps at the policy level to foster economic diversification, by refocusing economic growth towards the agriculture sector as well as private sector development. The economic diversification agenda is a significant part of the National Development Plan (2018-2022), PDMSA (2018 - 2022) and the Support Programme to Production, Export Diversification and Import Substitution (PRODESI[12]). Overall, the economic diversification drive presents important momentum to foster institutional and policy reforms, which can strengthen production by smallholder farmers, as well as ensure that they are able to produce surplus to supply the local markets.

21. The GoA has been guided by several policies and strategies to address poverty reduction: (i) 2005 Anti-poverty Strategy (ECP); (ii) 2009 National Strategy for Food and Nutrition Security (ENSAN); (iii) Integrated Municipal Program for Rural Development and the Fight Against Poverty (PMIDRCP), which resulted from the 2010 merger of the ECP and ENSAN; and (v) National Development Plans (PND) 2013-2017 and 2018-2022.

22. Despite building on the ECP and ENSAN, the previous PND did not result in increased allocations for agricultural development, and in 2012, only 1%-3% of public expenditure was allocated

[12] *Programa de Apoio à Produção, Diversificação das Exportações e Substituição das Importações.*

to MINAGRIF, and less than 1.0% to the Ministry of Fisheries and Aquaculture. The 2018-2022 PND aims to promote socio-economic and territorial development at national, sectoral and provincial level, incorporating long-term strategic development options as set out in the Long-term Strategy (ELP) Angola 2025.The Strategy covers two focal areas: (i) human development; and (ii) welfare and sustainable, diversified and inclusive economic development. The PND was prepared in close coordination with the sectorial and provincial planning bodies, strengthening the decentralization process and aiming at greater local-level ownership of the national development planning process. The PND provides a framework to restore confidence and embark on a path of diversifying the economy and promoting economic growth and development. Over the PND period the Angolan economy is expected to grow by 3% annually, with the agricultural sector a leading driver of growth (average rate of 8.9%).

23. **Agricultural sector policies**. The PND and 2018-2022 Medium-Term Development Plan for the Agricultural Sector (PMDSA) anchors the goal for agricultural development to the sustainable use of natural resources and the improvement of competitiveness, while achieving food security and self-sufficiency and taking advantage of market potentials. The medium-term plans include four strategic objectives, which address agriculture, livestock, forestry and cross-cutting issues, including capacity development and services to producers. The second strategic objective focuses on the development of family farming. With regards to agricultural research and extension, the GoA acknowledged the limited resources and coverage, and recognises FFSs as the preferred method for technology transfer.

24. **Environment and climate change policies**. In recent years, national policies addressed sustainable management of natural resources and the need for climate change adaptation. The PND includes environmental management among its priorities, as one of the pillars for sustainable development; and adaptation to climate change through small-scale irrigation development is included as a priority for the agricultural sector. At the same time, plans for the agricultural sector have moved from reliance on the abundance of natural resources to the need for their sustainable management. The Ministry of Environment (MINAMB) has the mandate for environmental protection and climate change adaptation. As part of the strategy to mainstream environmental and climate risk management, ecological centres have been constructed in Namibe, Cabinda, Cuando Cubango and Huambo Provinces. The centres will serve as capacity building and technology demonstration sites for a wide range of stakeholders including technicians and smallholder farmers.

25. Specific programmes and plans for addressing climate change include the Intended Nationally Determined Contributions [INDC, (2015)] that takes a longer-term perspective to include mitigation targets, and reiterates the priorities of the National Adaptation Programme of Action [NAPA (2011)]. These priorities include promoting sustainable land and water management for increased agricultural yields, soil erosion control through organic methods, diversifying crops to less climate sensitive cultivars and implementing water-harvesting systems in drought-prone areas. SREP will contribute directly to most of these priorities, through activities for soil and water conservation, improved water resources management and crop diversification.

B. Rationale and theory of change

26. GoA and IFAD are transitioning towards a programmatic approach with a long term vision to support the national economic diversification agenda, through interventions that strengthen rural and agriculture transformation, taking into account local specificities. SREP seeks to support the GoA and family farmers and their organisations in achieving improved nutrition and food security and resilient agricultural productivity. SREP has been designed to build on and complement two on-going IFAD co-financed projects implemented by IDA. SAMAP, which is implemented in the central highlands, will be complimented by SREP in four provinces in the north of the country. ARP supporting recovery from droughts in the south will be complemented by SREP in three provinces to build long-term resilience to increasing climate stresses and shocks. The rationale for SREP is that there has not been significant agricultural investments in the north of the country where there is high potential for agriculture production, while at the same time, ARP is focused on recovery and there remains a need to strengthen the resilience of livelihoods, given the likelihood of extreme weather recurrence. The SREP design is harmonized, in as much as possible with the SAMAP and ARP approaches and

implementation modalities already known to and applied by IDA. SREP's replication and complementing of these on-going projects ensures simplicity for implementing partners and takes advantage of already developed capacities.

27. The north and the south of Angola have different agro-ecosystems and socio-economic conditions (see Appendix 2). The north has relatively good climatic and soil conditions for agricultural production, whereas the south suffers from arid and semiarid conditions with high vulnerability to climate risks. Given the impacts of climate change, the southern region will continue to rely on food from other regions in Angola. Prospects exist for changes to be made in the cropping pattern in both regions. Cassava, a staple in the north is being introduced in the south as part of a risk mitigation strategy. The area of maize, more commonly found in the south, is expanding in the central and northern areas of the country. This illustrates the interrelationship of the two regions. Despite the differences, the overall baseline situation for smallholders sees similarities between the two regions in terms of food and nutrition insecurity, low agricultural productivity and market access, and general vulnerability to climate change risks. Given the diverse agro-ecological zones and vulnerability to extreme weather and climate change, SREP will introduce a corridor of agricultural investments approach to agricultural investments. Such an approach will take into account the specificities of each region and ensure that interventions are tailored to the challenges faced by farmer. The corridor approach will also facilitate for developmental synergies across the regions including transfer of experience on cassava production from the North to the South, market opportunities in the South for Cassava farmers in the North (and vice versa for the maize producers in the South).

28. SREP will support small family farmers in the north and in the south in their transformation from subsistence farming to diversified livelihoods and stable production outputs for own consumption and marketing of surplus, noting that in the south the farming systems are more agro-pastoral based than they are in the north. This change will be achieved through: a) strengthening institutional and private sector capacities for improved delivery of advisory and climate information services tailored to small family farmers' needs and conditions; b) strengthening of FFS and other extension approaches to support farmers in SLM, introduction of drought resilient crops and varieties, adaptation of cropping calendars, and management of rainwater harvesting and small scale irrigation; c) training in nutrition and healthy family diets; d) providing matching-grant funding which may be co-financed by resources from a revolving fund for increased access to water, adoption of climate resilient farming practices and establishment of alternative livelihoods.

29. For both the north and the south, special attention will be given to the inclusion and targeting of women, youth and vulnerable groups, by tailoring activities to their needs (see Appendix 2).The Theory of Change indicates how SREP will pursue the common objective of increasing the productivity and resilience of farm households and contributing to the goal of improved food and nutrition security of rural households. This is shown in Figure 1.

30. IFAD involvement brings considerable global experience and knowledge on pro-poor agriculture programmes for smallholders, including income and employment generating activities for rural households with special focus on women and youth in conditions of high vulnerability. SREP will apply a Community Demand-Driven (CDD) approach to ensure that project beneficiaries have a voice in determining the activities that best meet their needs and can be sustained. The programme will also align with the recommendation of the CSPE (2018), which indicates that capacity development becomes a key pillar of IFAD investments in the country. SREP will therefore contribute to fill the gap in the national human capital through the systematic allocation of resources and management provisions, that provide opportunities for capacity development at the individual and institutional level. FFS remains the pinnacle of IFAD support to enhancing capacities of smallholder farmers to generate and use new knowledge, as well as adopt improved agricultural practices.

31. IFAD involvement will help facilitate a harmonized framework among development partners for supporting smallholder agriculture in Angola. Because of its convening power, IFAD is attracting collaboration with other development agencies active in smallholder agriculture, in particular in the southern provinces where much of the development assistance is being channeled. In addition, SREP adds credibility to investment in the agricultural and rural sector and has the potential to attract additional donor support, such as the Arab Bank for Economic Development in Africa (BADEA and

French Development Agency (AFD), and funds to address climate change.. The co-financing arrangements with government and other development agencies further strengthen this catalytic effect and the associated opportunities for policy dialogue.

32. SREP is closely aligned with national priorities outlined in the PMDSA, PMIDRCP and the Long Term National Plan (PNLP). It is consistent with the PND, which highlights agriculture and rural development as priority areas and incorporates the Sustainable Development Goals (SDGs). SREP contributes directly to the objective of developing the family-farming sector through farmers' organisations and cooperatives. More specifically, in the south SREP is aligned with government priorities to strengthen the resilience of agro-pastoralists and smallholder farmers affected by climate change through: sustainable farming technologies; water and input supplies; rangeland management systems; income diversification activities; and early warning systems. SREP will contribute to four of the SDGs: ending poverty (Goal 1), zero hunger (Goal 2), climate change (Goal 13) and life on land (Goal 15).

33. The project is also aligned to IFAD's Strategic Framework 2016-2025 and contributes directly to: Strategic Objective (SO) 1 - increase poor rural people's productive capacities; SO3 - strengthen the environmental sustainability and climate resilience of poor rural people's economic activities; and SO2 - increase target beneficiaries' access to markets. SREP contributes to the objective of the Country Strategy Note (2017-2018), which is "*increased family-based production of basic food crops among food and nutrition-insecure groups in selected parts of the country*". SREP is also aligned with the new COSOP (2019-2024) being developed for Angola that supports sustainable and inclusive transformation of family farming to increase incomes, food security and diversified livelihoods for the rural poor, thus contributing to the country's economic diversification agenda. It will specifically contribute to SO1:Sustainably increase production and commercialisation through access to productive resources and climate resilient farming practices, and SO3: Strengthen institutional, community and human capacities to ensure effective implementation and sustainability of rural development programmes, and empower the rural poor to meaningfully participate in the transformation of the rural sector. SREP has also been informed by the preliminary findings of the recently completed Country Strategy and Programme Evaluation (2005-17) and has taken on board lessons learned.

II. Smallholder Resilience Enhancement Project Description

A. Project area and target group

34. **Project Area** – SREP's focus area comprises seven Provinces, three in the southern part (Cunene, Benguela, Namibe) and four in the northern part (Zaire, Uige, Bengo and Cuanza Norte). These provinces are all characterised by high poverty rates, malnutrition, food insecurity and vulnerability to climate change, particularly in the south. In the seven provinces, thirty-five municipalities have been tentatively targeted:22 in the north and 13in the south. The population of the target municipalities is 3.5 million - 12% of the overall population of the country and 74% of the population of the seven provinces concerned.

35. In the north, the main criteria for the selection of the municipalities are: (a) high incidence of food insecurity and vulnerability; (b) potential for agricultural development; (c) high population density; and d) geographical contiguity to maximise efficiency of project operations. In the south, the project will build on the recovery efforts of ARP and the provinces and the municipalities have been selected as thosemost affected by drought and floods. Selection criteria for the municipalities include:(a) areas with a high concentration of environmental degradation, food insecurity and poverty; and (b) areas and households affected by floods and droughts. SREP will help build longer term resilience in the three provinces.

36. The project area covers three zones with different agro-ecological conditions and agricultural production characteristics:

- **The Northern zone** (Cuanza Norte, Bengo, Zaire, Uige) is a tropical dry to humid forest area with average rainfall greater than 1,500 mm. Cassava is the main staple crop cultivated on65% of area planted. Other crops include mixed cropping of millet, groundnuts and sweet potatoes. Despite the productive potential of the area, crops are grown mainly for subsistence with very little surplus for sale.

- **The Central zone** (Benguela) comprises tropical plateaus with an altitude, between 1,000 and 2,500 metres and rainfall of 1,250-1,500 mm. Maize is more suitable and is cultivated in association with other traditional crops such as beans, sorghum, millet, groundnuts and sweet potatoes. The south eastern part however receives less rainfall and was affected by recent droughts and prolonged dry spells (2014-2016).

- **The Southern zone** (Namibe, Cunene) has a dry climate ranging from tropical desert (Namibe) to tropical dry savannah (Cunene) with low average rainfall of 200 mm and an average temperature of 20-22°C. Livestock production is the main activity and food crops mainly include sorghum and millet. The soils are affected by erosion and low fertility. Most households in this zone are vulnerable to climate shocks and face declining yields and livestock production due to increased land degradation and changing rainfall patterns.

37. **Target groups.** The project will target: (i) food insecure subsistence smallholder farmers, most of whom cultivate less than 2 hectares of land but with potential for productivity increases; (ii) small and stable family farms with some level of organisation, mainly through associations, producing at subsistence level with the potential to graduate into market-oriented production; (iii) women (at least 40% of beneficiaries) and youth (at least 25% of beneficiaries) organised to carry out processing, marketing and service-based income generating activities; and (iv) other vulnerable groups such as disabled persons and ex-combatants who will receive specific attention to facilitate their social integration in agricultural production and economic activities. The project will also specifically target agro-pastoralist in the south in recognition of the fact that the south is largely agro-pastoral, with livestock contributing significantly to the livelihood of rural households

38. In the north, SREP will target around 152,000 households i.e. 760,000 persons. In the south, SREP has a target of 65,400 households – about 327,000 persons. The four main target subgroups are described below:

- *Food insecure subsistence smallholder farmers*. This is the most representative of the agricultural producer groups found in the area and include those most vulnerable i.e. women, youth, the disabled and ex-combatants. Foodinsecure smallholder farmers account for approximately 70% of the project area population. Subsistence farmers generally own less than 2ha of land with between 0.5 and 1 ha in production. These households are essentially characterised by: (i) low production and productivity of the main crops (cassava, banana, peanuts, sweet potatoes, maize etc.); (ii) vulnerability to climate change; (iii) lack of or low access to production factors (land, improved inputs, water and capital); (iv) limited access to mechanisation; (v) weak organisational capacity; and (vi) low income levels. In general, they do not produce enough to cover their food needs and, in the south, are highly vulnerable to climate shocks. The objective for these farmers is to increase production for home consumption and sales in local markets through adapted production technologies, improved access to water and inputs and enhanced income generation.

- *Market oriented family farms with some level of organisation*. These are family farmers with diversified farming systems that comprise around 30% of the farming population in the project areas. Some of these households have up to 5 ha of farm land and are able to produce surpluses for the market. They are normally able to fulfil their own family consumption needs and are able to secure seeds, casual labour and access to animal traction (albeit to a limited extent). They also lack agricultural inputs, irrigation systems, and access to credit, markets and extension services. The objective for this group is to increase production through the use of improved technologies in the north; improved natural resources management conservation and climate smart agriculture in the south and income generation through access to markets in both regions.

- *Women and youth*. Womenheads of household, widows and young women are socially, culturally and economically disadvantaged but are responsible for ensuring the well-being of their families and agricultural activities. SREP will promote specific activities for women and youth organized into groups for processing (using labour saving technologies), marketing and service provision. Other activities targeting women concern nutrition, where women are at the centre of food preparation for the family. Particular attention will be given to the youth who lack opportunities in rural areas leading to their migration to urban centres.

- *Other vulnerable groups (disabled persons and ex-combatants).* The disabled are a significant disadvantaged social group due to their physical and or mental disabilities. The ex-combatants are generally more elderly, between the ages of 50 and 80, and are both socially and economically disadvantaged. They will be targeted through training and capacity building activities linked to service provision, income-generation and off-farm income opportunities.

39. **Targeting strategy**– The project will ensure the participation of poorer rural households, whilst being inclusive of the so-called 'better-off' smallholder farmers and specific vulnerable groups. The mechanisms include: (i) geographic targeting, (ii) self-targeting; and (iii) direct targeting. SREP design includes empowering, enabling and procedural measures to promote sustainable socio-economic development with particular focus on the youth, women and other vulnerable groups (ex-combatants and the disabled).

40. Geographic targeting will be used to select the provinces, municipalities and communes. Direct targeting will be used to choose activities, taking into consideration the accessibility, relevance and impacts of the different technologies for women, men, youth, the disabled and ex-combatants. Quotas will ensure the effective participation of vulnerable groups in project activities. Mentoring will be done to ensure proper participation, achievement and sustainability of interventions, especially for the vulnerable groups.

41. Women make up about 51% of the population and in rural areas they are mainly involved in agricultural production and the keeping of small livestock. Women and female-headed households are poor compared to men and male-headed households. Women do farm work such as tillage, planting, harvesting, transportation and processing, and also take care of the family nutrition as well as the reproductive roles. They, however, face the following challenges:(i) unequal access to resources (land, water, credit);(ii) low levels of literacy and numeracy;(iii) lack of business development and management skills; and (iv)limited voice, leadership and decision-making capacity in associations, cooperatives and other groups. Specific training to enhance women's empowerment and effective participation in activities and household welfare will be included in the FFS curricula. Investments that reduce women's workload such as provision of potable water and milling machines will be supported. Women-headed households will be given special attention based on their needs and constraints.

42. The majority of youth reside in urban areas due to rural-urban migration. The lack of incentives in the agricultural sector (lack of land and capital to invest) leads to a large number of rural youth migrating to urban areas where some go to school and gain formal employment. The project will use quotas to ensure participation of these youths. The project will develop women's and youths' skills in preparation of business plans, which may be co-financed by a matching grant following specific eligibility criteria and approval procedures. It will also educate women and men about ownership and inheritance rights, including land. In areas where female groups and youth's groups do not exist, the project will conduct gender awareness training at community level and set up women's and youth based self-help groups for knowledge-sharing on GAP and SLM practices. Special topics on youth development will be integrated into FFS curricula.

43. SREP will define targeting mechanisms, and the various activities for the different target groups. Geographic targeting will be used to select sites for infrastructure development, self-targeting will occur through participation in the FFS and investment planning and direct targeting will be used for specific activities directed to women, youth, ex combatants, the disabled and other vulnerable groups in the communities. The proposed activities for these different categories of beneficiaries are summarised in Appendix 4, Attachment 2.

B. Development objective and impact indicators

44. The goal of the SREP will be to contribute to improved household food and nutrition security of targeted households (152,600 households reporting improved food security, with data disaggregated by gender of household heads). The development objective is to increase agricultural productivity and resilience of targeted households (112,000 households reporting >30% increase in productivity disaggregated by gender of household heads; and 104,000 households reporting a >50% increase in resilience score[13] disaggregated by gender of household heads).

C. Outcomes/Components

45. SREP targets three agro-ecological zones – four Northern provinces (Bengo, Zaire, Uige and Cuanza Norte); and three southern provinces (Benguela, Namibe and Cunene) covering two agro-ecological zones). The project comprises two technical components divided into four sub-components: Component 1: Institutional Capacity Building and Sub-components 1.1 Strengthening capacity for improved services and 1.2 Investing in public rural infrastructure, and Component 2:Family farming strengthening and investment divided into the following sub-components: 2.1 Strengthening capacity for family farming and 2.2 Investment in family farming. SREP will be managed by a Project Coordination and Management Unit under IDA under a cross-cutting programme coordination and management component.

The Project will pursue its objective through four major outcomes:

- Outcome 1: Strengthened institutional capacity to deliver services to enhance food security, productivity and resilience - 125,000 farmers reporting regular use of advisory and support services.
- Outcome 2: Rural infrastructure to build resilience and enhance productivity and market access– 40,000 households reporting improved access to water, land and road infrastructure.
- Outcome 3: Farming families acquire skills and technologies for food and nutrition security, enhanced resilience/ productivity and market access– 80,000 households applying climate resilient technologies and practices, disaggregated by gender.
- Outcome 4: Improved profitability of farm and non-farm income generating activities to improve access to food – 80,000 households reporting at least 30%increase in the percentage of agriculture output sold at market.

D. Project Components

46. The project represents a two-pronged approach to food and nutrition insecurity alleviation. The components are summarized below, with further details presented in Appendix 4.

Component 1:Institutional Capacity Building& Rural Infrastructure (US$85.2 million)

47. Component 1 will be implemented through two sub-components, each with specific activities which are outlined in the box below.

Component 1: Institutional Capacity Building

Sub-Component 1.1: : Strengthening capacity for improved services to family farmers

The objective of this subcomponent is to strengthen the capacity and skills of government agricultural extension specialists at provincial and municipal level, and national NGOs supporting the development of family farming and their producer groups. This subcomponent will concentrate on building capacities at the provincial and local level, focusing on extension and service provider staff. It will provide the essential capacity building to ensure effective implementation of subcomponents 1.2

[13]Resilience of beneficiary household will be monitored using a resilience scorecard presented in Appendix 6.

and 2.2. This Subcomponent will include four major interrelated activities intended to improve the agriculture extension service delivery and strengthen the human resource capacity of advisory and service providers in climate change, environmental management, nutrition and livestock health services. The expected outcome is strengthened institutional capacity to deliver services to enhance food security, productivity and resilience. Activities include:

a) Agricultural Extension Service Delivery and Capacity Building: The project will support the recruitment and deployment of front line EDA extension staff in the target project areas. EDA staff and other actual/potential service providers will be trained in a range of technical subjects that include participatory extension, community organization, natural resource and environmental management and adaptation to climate change. Initial exposure to the concepts will be through classroom training followed up by in-service training.

b) Strengthening of the Agro-Meteorological Network. Investments will be made in strengthening the collection and analysis of data by agro-meteorological networks, improve forecasting models taking into account historic climate data and trends, and improve the provision of weather and climate information services to smallholders. This will allow them to optimize water use in irrigation, soil conservation and erosion prevention practices as well as adapting decisions on planting dates, crops and varieties. Participatory approaches will be adopted for developing weather and climate information services and formats relevant for smallholders and build their capacities in selecting adaptation actions based on different forecasts and alerts and long term adaptive changes in their farming systems and management of NR based on historic and future climate trends. The activity will be coordinated by an Environmental expert recruited by the project.

c) Nutrition education and training. The focus will be on training extension workers and service providers in understanding the relevance of better nutrition to climate resilient productivity and livelihoods diversification. The activity will support the government's national school meal programme in coordination with other line Ministries.

d) Strengthening of Animal Health Services: Technical training and equipment will be offered to field staff of the Veterinary Service Institute (ISV) at provincial and municipal level to build a cadre of Community Animal Health Workers (CAHWs). This activity will be targeted to the southern provinces. Qualified veterinary oversight will be made available to support the CAHWs through the veterinary institute and local private veterinarians.

Sub-Component 1.2: Investing in public rural infrastructure for resilience and market access

The objective of this subcomponent is to invest in construction of rural infrastructure and land development to enhance climate resilience and promote better production and marketing conditions. Different types of investments will be supported including: a) the construction and rehabilitation of feeder roads, b) construction of market facilities, c) water resources development including small scale irrigation, and d) sustainable land management. The investments will be identified taking into account the needs identified in the NRM and small business planning process in subcomponent 2.1 and the creation of synergies and maximizing benefits of investments made under subcomponent 2.2. The expected outcome is rural infrastructure to build resilience and enhance productivity and market access. Activities include:

a) Feeder Road rehabilitation and maintenance: Investments will be made to improve the condition of selected feeder roads and to construct drainage infrastructure (culverts) where needed. Road gangs will be formed for road rehabilitation, and provincial road maintenance plans will be prepared.

b) Market Infrastructure and Stakeholder Platforms: Market infrastructure will be provided at

commune and municipal level in the form of aggregation and storages facilities (warehouses) and platforms for stakeholders to convene. Investments will include collection points, storage and package facilities and field shops. A Civil Engineer will be recruited to oversee the public works.

c) Water Infrastructure: Small scale water harvesting structures will be developed to increase water quality and availability for multi-purpose usage. Successfully proven technologies will be replicated and scaled. The infrastructure will be linked to the creation of community water users groups (subcomponent 2.1) for the operation and maintenance of the infrastructure and implementation of catchment management and conservation. This will be important for the sustainability and effectiveness of the infrastructure including reduced siltation and as such maintenance costs and increased lifetime.

d) Small-Scale Irrigation: Small scale irrigation will be extended through low-cost technologies that are easy to operate and maintain. Schemes will be funded based on investment proposals incorporating prefeasibility studies, feasibility studies, detailed design, and environment management plans. WUAs will be set up and supported to ensure sustainability in the operation and management and negotiate and implement governance scheme to ensure equitable access to water and to avoid possible conflicts.

e) Sustainable Land Management: Interventions to redress land degradation will include (a) rehabilitating rangelands and pastures and implementing rangeland management schemes and (b) undertaking soil and water conservation measures. International and national consultants will be recruited to provide technical assistance in Water Resources Development (water harvesting and small scale irrigation), Sustainable Land Management and Pasture/ Rangelands Development.

Component 2: Family Farming Strengthening and Investment (US$37.9 million)

48. Component 2 will be implemented through two sub-components, mutually reinforcing each other, each with specific activities, which are outlined in the box below.

Sub-Component 2.1: Strengthening capacity for family farming

The objective of this Subcomponent is to strengthen the capacity and skills of family farmers and their communities through government agricultural extension workers and national NGOs supporting the development of family farming. The FFS methodology will be used as the main instrument for reaching target households within the community and create groups learning together through experimenting and adoption of new practices. The skills and capacities required at field level will be strengthened to ensure that communities become more resilient to climate-related shocks and that the necessary support services to communities and households will be readily available.

The outcome of Sub-Component 2.1 will be the acquisition of skills and technologies among family farmers for improved food security, productivity, and increased resilience. Activities include:

a) Community organization, Planning and Mentoring: SREP will assist crop farmers and agro-pastoralists and their communities to prepare and implement business development plans especially in the north and natural resource management plans, mobilise the community and organise farmers into self-help producers and user groups. A social mobilization process will be followed that develops self-reliance among community members. A cadre of Community Development Facilitators will be selected from within the target communities to lead the social mobilisation and group formation/strengthening and mentoring processes.

b)Training of farmers and community members: The FFS approach will be replicated and extended throughout the project target areas. Approximately 5,000 schools will be established with 3,500 in the northern provinces and 1,500 in the southern provinces. The activity will be implemented through service provider contracts with experienced national NGOs. The project will also provide technical assistance support through the recruitment of two national FFS officers supported by an international FFS specialist.

Sub-Component 2.2: Investment in family farming

The objective of this Subcomponent is to improve agricultural productivity, increase value addition, link farmers to markets and increase incomes and livelihood opportunities for family farmers. Agricultural productivity will be enhanced under rain-fed crop and irrigated systems and livelihoods diversified in alignment with the NRM plans developed under subcomponent 2.1 and accompanied by the capacity building efforts to ensure sustainability of activities (Subcomponents 1.1 and 2.1). Poor dietary diversity will be addressed by increasing the availability and consumption of nutritious and diverse foods and enhancing income to ensure healthy eating and improved family diets.

The **outcome** of Subcomponent 2.2 will be improved profitability of farm and non-farm income generating activities to improve access to food. To prioritize investments, farmers and producer groups will be supported in developing small investment proposals (subprojects or micro projects) including a simple business plan aligned with the NRM plans (subcomponent 2.1). Activities to be financed include:

a) Agricultural Diversification and Improved Productivity: SREP will address food insecurity and malnutrition by enhancing the production and sales of staple food surpluses (maize, millet, sorghum) while diversifying the rainfed system and household diets by including cassava, sweet potato and beans. Small livestock will also be offered to provide a safety net for the more vulnerable households with limited access to land. Approximately 55,000 farm households will be targeted for this activity.

b) Post-harvest Management and Value Addition: Activities will include piloting and demonstrating new PHM and VA technologies. Small PHM investment grants will be offered to households to fund investment in new PHM or value adding technologies that are not commercially available or accessible. Approximately 6,000 households will be targeted for this activity.

c)Rural Micro and Small-Scale-Agri-Business Promotion: Matching grants will be offered to youth, women, able bodied persons, and entrepreneurial small farmers to provide commercial goods and services (input supplies, mechanization, spraying, transportation etc.) to farm households. Approximately 4,500 businesses will be supported, mainly in the higher potential northern provinces. Comprehensive eligibility criteria will be established as part of pre-start-up activities of the project to ensure effective implementation of matching grants

Component 3: Project Coordination and Management (US$21.7 million)

49. Component 3 is a cross cutting component to the technical components described above. The lack of institutional capacity is well recognised as a limitation to the effective implementation of projects in Angola. Institution strengthening measures in project management, finance and procurement are crucial to ensure that the Project objectives are achieved.

53. Component 3 is divided into two sub-components: a) the SREP Project Implementation Unit (PIU); and b) the Single Coordination Unit and Portfolio Implementation Facility (PIF). Detailed implementation arrangements are described in Technical Annex 5.

Sub-component 3.1: SREP Project Implementation Unit (PIU): MINAGRI will establish a Project Implementation Unit (PIU) at national level, led by a National Project Manager. MINAGRI-IDA will work very closely with the PIU to oversee the implementation. The unit will be responsible for project coordination. Implementation will be led by two Team Leaders – one to be stationed in one of the northern provinces and the other in the south – responsible for day to day implementation.

Sub-component 3.2: Single Coordination Unit/ Portfolio Implementation Facility: The Single Coordination Unit (SCU) will be set up to strengthen the capacity of the management staff of the IFAD-financed programme in management, M&E and fiduciary issues. The SCU will be led by the current SAMAP and ARP Coordinator who will oversee SREP implementation and will be responsible for strategic management of the IFAD programme.

A Portfolio Implementation Facility (PIF) will be set up to support the SCU with the timely sourcing of national personnel to fill key management and fiduciary positions in the IFAD programme and provide technical assistance in training and mentoring of national counterparts and the set-up of management, procurement and financial systems.

54. **Project Sequencing.** The Project will be implemented over six years using a gradual approach to establish operational modalities, train staff, set up and implement farmer field schools, engage with communities and screen/evaluate micro and sub-projects and develop partnerships and coordination arrangements. An interim review of SREP will be conducted after several years of operations to inform decisions on expansion to additional municipalities. A mid-term review will be undertaken in year 4.

E. Lessons learned and adherence to IFAD policies and the SECAP

55. Lessons learned from IFAD's experience in project implementation have guided the SREP design. These include:

Design and implementation of sub (micro) projects

56. *Investing with farmers through demand-driven small investment proposals (subprojects) promotes sustainability***.** The modalities for preparing and implementing demand-driven subprojects under MOSAP has generally been regarded as successful (see project external evaluation) and investment criteria, procedures and selection mechanism have evolved over time from MOSAP to SAMAP and MOSAP II based on lessons learned. The key elements of success were: (a) creation of ownership through community participation in all stages of subproject preparation and implementation, as well as direct community contributions (cash or in-kind); (b) commitment of FOs to take responsibility for O&M before disbursement of project contributions; and (c) training of FOs and assistance with establishment of user rules and cost-sharing agreements. These elements together with the proven investment criteria, procedures and selection mechanism already managed by IDA have been incorporated in the SREP design.

57. *The design of micro-projects requires flexibility as well as clear eligibility criteria for the different categories of beneficiary groups.* Under MOSAP I and II, more recently SAMAP sub-projects are offered at three different levels: (a) area level for infrastructure investments;(b) community and group level, for productive group investments; and (c) individual household level for a different types of beneficiaries (women, youth, ex-combatants, the disabled and the ultra-poor). Flexibility is needed to ensure inclusiveness and the ability to reach the more vulnerable households. Besides matching grants and revolving fund mechanisms, direct cash and kind transfers can also be applied.

58. *M&E is an important management tool for project adaptation to changing contexts*: Lessons learned from MOSAP and the IFAD portfolio under implementation recognise the importance of M&E. However, there is a dearth of skilled M&E experts in the country. Considerable time is taken to recruit and retain M&E experts. The collection, compilation and analysis of field data for monitoring purposes is a major challenge requiring the development of appropriate software for use at field level. Given these lessons it is vitally important that adequate technical staffing at all levels is included in project design. Resources also need to be made available for external Technical Assistance support in M&E design. Service providers and communities need to be mobilised and trained to support the M&E system in the target areas.

Capacity building and incentives

59. *Ensuring simplicity of design and ease of implementation*: Considering the recurrent difficulties in project implementation in Angola due to the limited human capital, there is a need for simplification in project design and implementation. Projects with simple, flexible designs place fewer demands on the available managerial and financial resources. Effort is needed to reduce the complexity of project design and focus on key interventions. Partnerships should be pursued with other stakeholders to achieve and upscale results. These factors also point to the need for more intensive guidance for projects to operate efficiently and effectively in Angola.

60. *Strengthening the capacity of local service providers is necessary to help FOs and other beneficiaries to develop and implement micro project proposals.* While the use of local service providers to assist FOs in the preparation and implementation of sub-projects is preferable for long term sustainability, their capacity is being stretched, particularly as donor support for the country is expanding. Project design has to recognise this limitation and find ways to capacitate local NGOs. A cadre of specialised international TA will be necessary to provide effective support to IDA staff, local NGOs and the private sector throughout project implementation.

61. *Involvement of local authorities at the provincial and municipal levels in planning and monitoring project activities:* Engaging local authorities in implementation has been vital in ensuring ownership of the project at local level, facilitating local coordination and contributing to the decentralised planning process. Over time, it will also help to convince local authorities to make available budgetary resources for smallholder farmer support and development.

62. *Effective operations and maintenance of infrastructure*: The need to ensure that capacity exists to sustainably operate and maintain infrastructure works. A strategy O&M of infrastructure should involve all stakeholders and be developed before construction is undertaken. This could be addressed through capacity building, and awareness raising through community-based development and management plans. A community development approach to the management of infrastructure can reduce investment costs, provide good results, and lead to strengthening of participating groups.

63. *Building government capacity for project implementation and stronger country ownership.* The pace of project implementation has often been slow, especially during the start-up. A concerted effort will be required to build the capacity of government staff. In the short term, efforts will be needed to develop capacity in fiduciary matters to manage and implement projects more effectively. Technical capacity in agriculture, sustainable land management and participatory processes will similarly need to be enhanced. Over the longer-term, capacity building efforts are needed to strengthen IDA's field presence in these technical areas.

64. *Incorporating an incentive system for key government staff involved in project implementation:* This has proved to be effective in helping to achieve project targets. Government staff working under the project will require a satisfactory work environment (training, equipment and living conditions) to incentivise provincial and front-line extension staff involved in project implementation.

Inclusivity

65. *Provisions for women's empowerment*: All project design reports have made adequate provisions for the inclusion of women as beneficiaries, including references to empowerment. In practice, however, efforts towards women's empowerment have been limited, with a minimal share of women in leadership roles in FFSs, associations and cooperatives and in a technical capacity as members of PPIUs. Greater effort is needed to ensure that women play a stronger role in farmers' organisations and influence project investment decisions.

66. *Targeted interventions for youth:* Although youth have been identified as target beneficiaries in some of the projects, there has been little impact. Designing interventions that target youth is recognised, nationally, as important in terms of generating employment and ensuring national security by offering young people opportunities for decent work and sustainable livelihoods, particularly in rural areas. Both women's empowerment and inclusion of youth are among the fundamental pillars of the national goals of Angola to ensure an equitable and peaceful society.

Building resilience and sustainability

67. *Community development through FFSs as a key mode of project implementation and scaling:* The FFS approach has been effective in enhancing smallholder farmers' capacity to generate and use new knowledge and adopt improved agricultural practices. It is also a methodology that empowers smallholders. The FFS approach has been incorporated in all IFAD projects and those of other agencies (AfDB, EU, World Bank) and is being implemented at scale. The FFS approach is also recognised as a mechanism to ensure institutional sustainability beyond the project life by evolving over time into farmer associations or cooperatives, linking members and their organisations to markets and empowering smallholders to improve their livelihoods. The approach has been accepted by Government as its national extension strategy and will be used in future project designs.

68. *Importance of linking smallholder farmers with markets*. SREP Norte, in particular, needs to provide support for marketing activities at several levels, including assistance to FOs and entrepreneurs in bulking of agricultural produce or purchase of inputs, and in small- and medium-scale processing. Such interventions can stimulate investment diversification and the strengthening of rural enterprises.

69. *Building resilience of smallholders*: The adverse impacts of climate change are already affecting rural livelihoods in Angola, particularly agriculture production in the southern regions. The recent droughts drew attention to the need for enhancing resilience to improve livelihoods and encourage the sustainable use and management of natural resources.

70. *Environmental Management*: The FFS is an effective instrument to improve environmental management in farming activities. This requires capacity building of the trainers and the EDA staff. Stronger collaboration is also required between the MINAMB and the MINAGRI teams to equip various technicians with skills and tools to provide advisory services and support to smallholders.

71. *Land degradation*: Particular attention is required in some locations where soil erosion is becoming increasingly a cause of concern such as cultivation on hill slopes and the expansion of agricultural land. Soil and water conservation measures can be promoted to address the issues of land degradation.

72. **Adherence to IFAD policies:** SREP applies several of the core principles of IFAD's policy on Environment and NRM. The agricultural production investments in the north will scale-up multiple-benefit approaches for sustainable agriculture that have already been introduced under MOSAP I and are also planned under the SAMAP. In the south, SREP will promote 'Climate-smart' approaches such as sustainable land and water management practices to build the resilience of the smallholder farmers. SREP pays greater attention to risk and resilience through the criteria for selecting beneficiaries in order to manage environment and natural resource-related shocks and thus maintain or enhance their agricultural productivity. Capacity building through the FFSs and strengthening of FOs is expected to result in improved governance of natural assets by community-led empowerment.

73. IFAD's SEA policy requires that appropriate precautionary and remedial measures to identify/receive/remedy/report (proportionate to level of risk) any occurrences of potential SH/SEA risks/complaints are in place. For more information see: https://www.ifad.org/web/guest/document-detail/asset/40738506.

74. SREP adheres to IFAD's targeting policy by using the criterion of food insecurity, which also extends to poverty and vulnerability to climate change. SREP also adheres to the three strategic objectives of IFAD's Gender Policy. It promotes economic empowerment to enable rural women and men to participate in and benefit from profitable economic activities. Institutional strengthening and capacity building of FOs and the FFS approach are also expected to enable women and men to have equal voice in rural institutions and organizations. Labour saving technologies and livelihoods

diversification targeting women and youth will also contribute to a more equitable balance in workloads and in the sharing of economic and social benefits between women and men. SREP's targeting and gender approach is elaborated in Appendix 2.

75. **Social, Environmental and Climate Assessment Procedures (SECAP**): The environmental and social category assigned to SREP is B. It will support activities including: agriculture intensification in non-sensitive areas; integrated pest management and credit for purchase of pesticides/other agrochemicals and training in their safe use and SLM practices. The agricultural production activities and construction of livelihood supporting infrastructure may result in localised environmental impacts which can be managed and minimised, if required, through the implementation of best practices and environmental and social management plans (ESMPs). Feeder road rehabilitation and market infrastructure investments will be designed, constructed and operated under adequate environmental and social standards. Environmental management, monitoring and mitigation capacities will be developed through awareness and training on best practices and preparing site management plans. Training will cover waste management practices, safe handling of agro-chemicals, improved pest management, improved storage, improved soil and water conservation measures and natural resources management. Potential conflicts with wildlife fauna may occur at particular sites and the drafted EMSP will be finalised during early stages of implementation. The awareness and capacity building activities for farmers will be delivered through FFSs while more technical training will be provided for IDA/EDA and MINAMB Departments at provincial and municipal level.

76. SREP should follow IFAD's Complaints Procedure to resolve concerns and complaints with respect to alleged non-compliance of its environmental and social policies and mandatory aspects of its Social, Environmental and Climate Assessment Procedures. These are laid out in detail in IFAD's webpage: https://www.ifad.org/web/guest/accountability-and-complaints-procedure

77. The climate risk classification for the SREP is high. Rain-fed cropping in the northern provinces is subject to significant annual variations in rainfall, and thereby productivity fluctuations, while the southern provinces have been severely affected by droughts and floods. In both areas, farmers use traditional cropping methods, with limited awareness of soil or water conservation, replacement of soil nutrients, choice of plant varieties, irrigation, or other climate-adaptive technologies. A detailed climate vulnerability analysis will be conducted to further inform adaptation measures including improvements in cropping technology, which will increase farmer's resilience to climate variability and change.

78. More detail on minimising the potential negative environmental and social impacts as well as climate risk is included in the SECAP Review Note, in Appendix 12.

III. SREP implementation

A. Approach

79. SREP is divided between three distinct geographical and agro-ecological locations in Angola – on in the northern provinces (4) and two in the southern provinces (3).). In the north, SREP will cover provinces where the agro-ecological potential and socio-economic conditions are conducive to more market-oriented approaches to farming. The strategy will replicate the experience of MOSAP and SAMAP operating in the higher potential areas of the country, focusing on productivity increases and linking farmers to markets. In the south, SREP will build resilience in three of the drought affected southern provinces. SREP will also target the beneficiaries covered by ARP which builds on previous emergency programmes and supports the recovery of the production capacities of family farmers most affected by the droughts and floods over the period 2012-2016.

80. The FFS is increasingly regarded as the principal extension approach in Angola and will be the main instrument to promote resilience and sustainable agricultural development. FFSs will be used to create social and financial capital whilst acting as a delivery mechanism for community infrastructure

development and new technologies. FFSshave proved to be an effective means under emergency and recovery conditions to mobilise the community, undertake communal public works and provide training and extension support. Notwithstanding these benefits, there are noticeable weaknesses in household adoption of improved practices and in reaching the most vulnerable households[14]. In the southern provinces, SREP will work with existing FFSs to fill identified gaps and strengthen their resilience to climate change. Additional FFSs will also be established to reach beneficiaries not served by previous programmes.

81. In the northern provinces, SREP will venture into new territory, targeting food insecure municipalities with potential for agricultural development. The northern provinces have also been impacted by climate change evidenced by extended dry period and dry spells. The inclusion of the northern provinces, which came as a request by GoA, broadens IFADs presence in the country by creating a corridor of agricultural investment with opportunities to scale up the GAPs introduced through other donor funded projects.

82. SREP will harmonize with SAMAP and ARP, with partners and service providers playing a critical role in implementation, possibly including UN organizations, such as FAO, UNDP, international and local NGOs, consultancy firms and/ or individual consultants. This has been a crucial factor in the success of previous projects.

B. Sequencing

83. SREP will be implemented over a period of six years, concentrating on priority areas within the target municipalities where there is high population density and higher incidence of vulnerable households. In the north, implementation will start in two provinces (Uige and Cuanza Norte) and eight municipalities will receive intensive support. In PY2 another five municipalities within these same provinces will be added. In PY3, a further two provinces (Bengo and Zaire) will be added, with implementation in eight municipalities. In the south, implementation will begin from PY1 in the three provinces simultaneously, starting in the same municipalities where ARP is being implemented. The interventions in the south are designed to complement the recovery efforts of ARP by strengthening the resilience of households and communities.

84. Criteria for the selection of municipalities will be included in the PIM, and the AWPBs for PY1, PY2 and PY3 (subject to approval by IFAD) will indicate the proposed municipalities and communes to be covered. Any decision to expand target areas will only be justified by satisfactory progress in the initial target areas, as evidenced by annual implementation reviews.

85. The approach to project implementation is based on recognition that: (i) project implementation capacity of IDA and NGO service providers is limited; (ii) many of the FOs and associations already set up are weak and at a fledgling stage of organizational development; and (iii) pro-community policies, such as local empowerment, targeting and promoting gender equity are incipient in Angola's rural development sector. As such, SREP will focus on strengthening the capacity of IDA/EDA, other government institutions, and local NGO service providers to, in turn, strengthen the capacity of family farmer groups, associations and cooperatives locally. Implicit to the design is to develop a "training of trainers'' programme for FFS implementation together with a longer-term strategy of capacitating EDA extension workers and NGO service providers.

85.

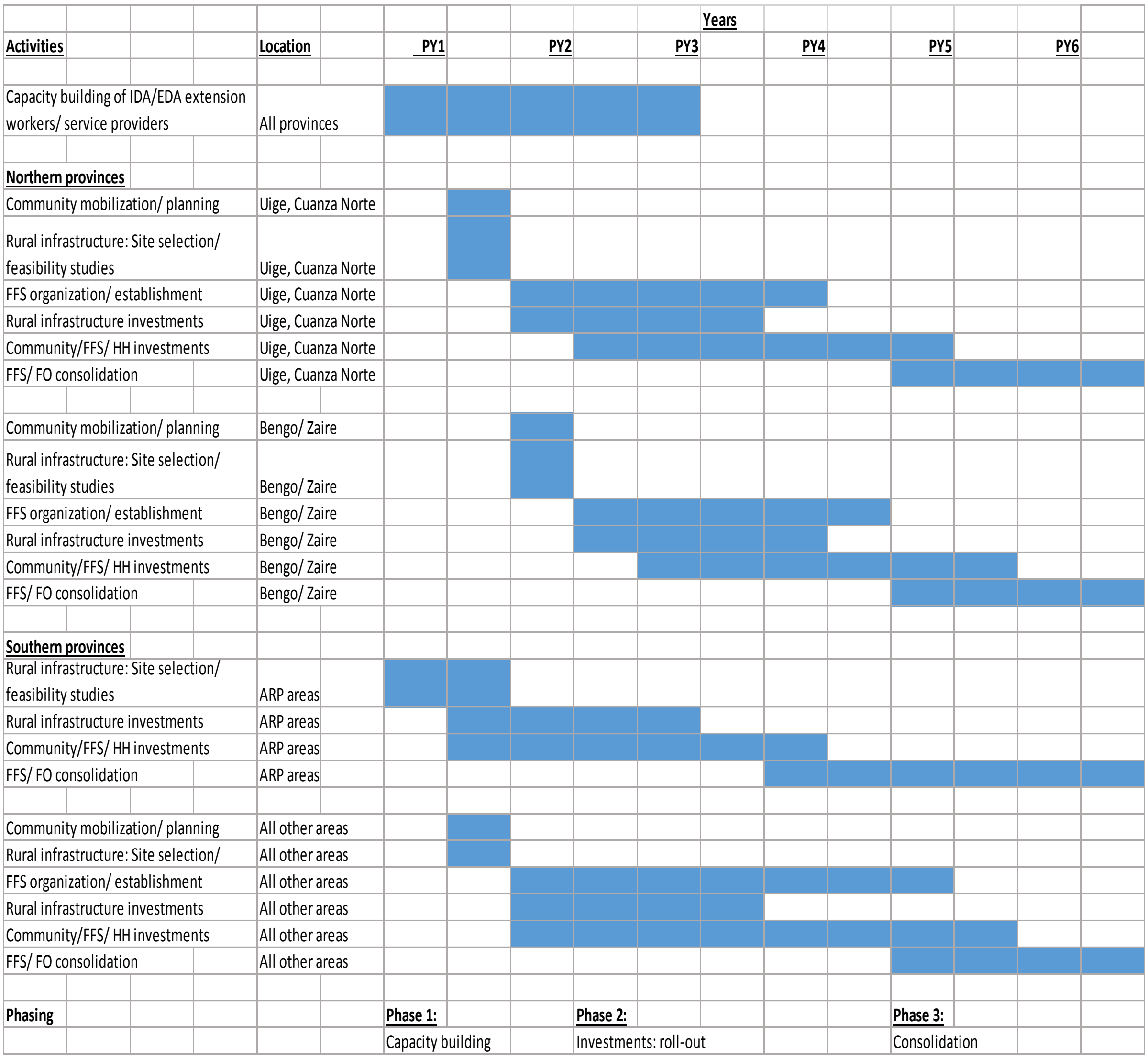
86. Given the capacity limitations and the need to closely involve and empower communities and FOs to ensure longer term sustainability, the approach will focus initially on (a) capacity building of extension workers and service providers, (b), a planning process that identifies sites and appraises infrastructure; and(c) investments in infrastructure and community, group and household activities.

[14]In many of the cases the FFS under the emergency programmes experienced weaknesses of low adoption at household level because of the short time frame of the programme and the primary focus on activities implemented through the common plot. The programme also experienced challenges of lack of mentoring support of the Master Trainers that did not have adequate operational funds to support the FFS at community level.

87. SREP will need to rely on service providers for the implementation of activities outside the core competencies of IDA, and the capacity-building of these service providers by the project will be essential to ensure effective and sustainable implementation. The sequencing of implementation in the SREP-supported provinces is presented in the figure below.

88. Initial efforts will concentrate on capacity building of service providers (IDA extension staff and NGOs) through a concerted training programme that will involve a needs assessment and the design and organisation of a series of training programmes in agricultural production, natural resource management, climate change, environmental management and nutrition. As new vacancies for extension workers become filled over the course of the first year of implementation, additional training programmes will be organised. In the northern provinces, SREP will target, as a priority for implementation, Uige and Caunza Norte, where the highest concentration of farm households can be found. Other capacity building activities will include planning for rural infrastructure: site selection and the preparation of feasibility studies. In the northern provinces investments in infrastructure, FFS establishment and investment will take place from year 2. From year 3, SREP will move into the remaining 2 provinces in the north – Bengo and Zaire.

89. In the southern provinces, SREP will build on the community development/FFS activities of ARP. Immediately following support staff organization and capacity building, investments to support resilience at household level will be made. Rural infrastructure site selection and feasibility study preparation will begin immediately and investments could be made in the last six months of year 1. Community and household investments will similarly be made at that time. For non-ARP areas, the process of social mobilization, planning and FFS establishment will begin towards the end of the first year, and investments made from year 2. FO consolidation will occur from the end of year 4. A two-year period is assumed for consolidation following the full 30 months of FFS implementation. During the consolidation period, focus will be placed on linking farmers to markets and building the management and financial capacity of FOs.



90. **Collaboration with other Development Partners' Programmes/Projects.** SREP will coordinate and harmonise with Programmes/Projects financed by government and various development partners that support SREP-related thematic areas. This is aimed at taking advantage of synergies and avoiding duplications. Some of such Programmes/Projects include:

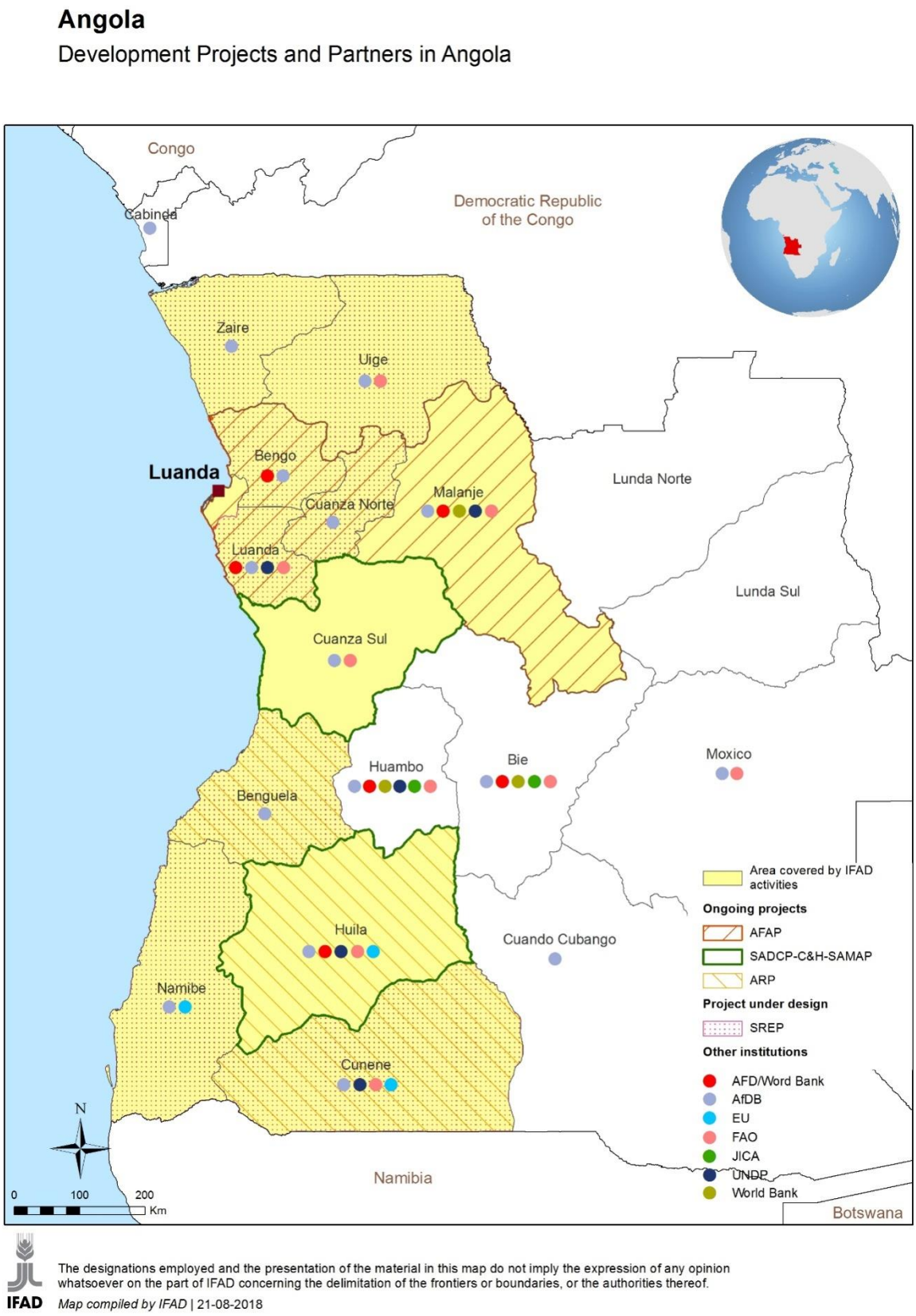
- *Strengthening Resilience and Food and Nutrition Security in Angola* – an EU funded project costing EUR 70 million, with the objective *to contribute to the reduction of hunger, poverty and vulnerability to food and nutrition insecurity, in the provinces most affected by climate change – Cunene, Huila and Namibe.* The project focuses on: (a) basic nutrition; (b) water and sanitation; (c) agriculture (land, water, inputs, extension, services, cooperatives); (d) environmental protection; (e) disaster prevention and preparedness; and (f) developmental food security assistance. Given the overlap in two of the SREP provinces (Cunene and Namibe), coordination will be critically important to ensure that different municipalities and/or communes are targeted and that there is complementarity of activities. The resilience focus of this project will complement ARP and supplement the SREP activities in cognisance of the number of drought affected households exceeding 200,000. Climate vulnerability mapping will be part of the project to further inform the resilience building activities, which will be beneficial also for the municipal level targeting of SREP.
- Some UN agencies and NGOs are working closely with the GoA within the Drought Recovery Framework established by the National Plan for Preparation, Contingency Response and

Recovery 2015-2017. SREP will contribute especially to pillars on socio-economic activities, water management and agriculture.

- The AfDB will be supporting the operationalisation of the four agro-ecological centres established by MINAMB in Namibe, Cuando Cubango, Huambo and Cabinda. The centre in Namibe (Bibala) could be used for training of smallholders on climate resilient agricultural practices and livelihood diversification options once operational. This will enhance the collaboration between MINAMB and MINAGRI as extension officers could also benefit from the training. The project will benefit from Global Environment Facility financing and the smallholders targeted under the SREP could benefit from the capacity building that will be provided through the centre.
- Agence Française de Développement (AFD) has prioritised support to energy, agriculture and water sectors in Angola. Discussions with the AFD representative confirm interest in co-financing SREP activities relating to resilience in both the northern and southern provinces. AFD investment priorities include developing water resources and related infrastructure and thus applying an ecosystem-based adaptation approach to contribute to the resilience building of the communities.
- Since the mid 1970's BADEA provided GoA with a total funding of US$64.9 million for 11 projects. Two loans have been approved for the education sector with some impact on capacity building of the IDA extension system at national level. BADEA has indicated synergies with SREP in the formal training of agricultural middle school participants a human resource reservoir for the IDA extension service.

A map of the IFAD project portfolio location and activities is given below.

Figure 2: Map of Development Projects and Partners



IFAD

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

Map compiled by IFAD | 21-08-2018

C. Organizational Framework

Project Management Structure

91. SREP has been designed to ensure simplicity in project implementation by building on the implementation arrangements for SAMAP and ARP in the central and southern regions, respectively. An innovative element to these arrangements is the establishment of the Single Coordination Unit (SCU) to coordinate and oversee the IFAD investment portfolio being implemented through MINAGRIF. These considerations are also a response to the IFAD CSPE which noted the need to adjust to the limited implementation capacity in Angola and build on lessons learned from project implementation in the country.

92. SREP will be coordinated through the establishment of a **Project Implementation Unit (PIU)**, staffed by a Project Manager, a Finance Officer, a Procurement Officer, and an M&E officer. The Project Manager will be supported by two Team Leaders, one for the north and another for the south, deployed in provincial offices. The Teams will be responsible for the day-to-day management of SREP in the north and south.

93. The Project will be implemented by the IDA, from the National to the Municipal level, and there will be strong coordination and consultation mechanisms with the relevant government stakeholders and authorities at different levels. The institutional framework for execution is as follows:

94. **Provincial Project Implementation Units (PPIUs):** Four Provincial Project Implementation Units (PPIUs) will be established. In the four northern provinces, two Provincial Units will be set up; one in the town of Mbanza Congo covering Bengo and Zaire region; and another in the town of Uige covering the Uige and Cuanza Norte region. For the south, two more Provincial Units will be set up in Benguela and Namibe. The units will be located in EDA offices. Given the distances involved, three sub-unit offices will similarly need to be set up in the provinces where there is no project representation. Tentative locations include sub-offices in Bengo province (the town of Caxite), Cuanza Norte, (Mdalatondo), and in Cunene (the town of Ondjiva). Selection of locations were made considering criteria such as: easy access to other target municipalities, presence of IDA/EDA staff and current office conditions. These locations, however, should be regarded as tentative with a final decision to be made by IDA in collaboration with the Provincial Governments.

95. The PPIUs will be lightly staffed, as most of the investment and technical support duties will be implemented by service providers, and fiduciary management will mostly be done centrally. The four main PPIUs will include an Area Manager, an Assistant Finance Officer, an Assistant Procurement Officer; an Administrative Assistant, a Secretary and a Driver. For the Sub-offices the personnel will include an Area Manager, an Administrative Assistant and driver. See Figure 6 below. The Area Managers will work in close collaboration with the Provincial Directors of IDA and the Heads of EDA Offices in the target municipalities and will be expected to assist in strengthening local capacities. There will be two M&E officers, one for each of the project areas – north and south – and three M&E Assistants (one in the south and two in the north). Decisions regarding their deployment will be made later.

96. SREP implementation staff, at all levels, will receive capacity-building assistance from the SCU to support subproject implementation technically, operationally and administratively, and especially to strengthen M&E capacity. The responsibilities of the SREP Team Leaders will include technical supervision and coordination, overall project planning, quality oversight, communication, reporting of Project activities and progress on a regular basis. Fiduciary issues will be managed in conformity with the standards and requirements agreed upon with IFAD, in accordance with the Financing Agreement and other Project documents, such as the Project Design Report and the PIM. Support in fiduciary matters will be provided by the SCU. The designated team leaders will come under the supervision of the SREP National Project Manager and will accountable to the Director General of IDA. SREP staff, at all levels, will receive capacity-building assistance from the SCU to support project implementation technically, operationally and administratively, and especially to strengthen M&E capacity.

97. **Single Coordination Unit.** The SCUwill be established to ensure ease of coordination and oversight, cost efficiencies through shared functions, and developing capacity of IFAD project management staff in fiduciary issues for more effective implementation. The SCU will be responsible for the overall coordination of the IFAD programme portfolio implemented through MINAGRI, including

SAMAP, ARP and SREP[15]. The SCU will be led by the current SAMAP-and ARP Coordinator who will oversee SREP implementation and will be responsible for effective coordination of day-to-day operations. The Unit will be responsible for fiduciary management, planning, monitoring and evaluation. The SCU will be staffed by a team comprising, the SCU National Coordinator, a Senior Financial Controller, a Senior Procurement Officer and a Senior M&E Officer. These positions will initially be financed by SAMAP and once SREP will enter into force, the costs will be shared between the two projects. Technical support will be provided to strengthen the management and fiduciary capacity of IFAD's programme, as recommended by IFAD's CSPE. Technical assistance in key subject areas will also be available within the SCU to support the technical capacity of project staff, service providers and beneficiaries. These will include, amongst others, experts in Civil Engineering, Environmental Management, FFS (agronomy), Social Development, Agribusiness and Marketing and Water Resources Development. The SCU will host the SREP Manager, two M&E Officers (for the two subprojects), a Procurement Officer and a Finance Management Officer. As the SCU will be working with IFAD's ongoing portfolio, the costs of establishment and operation will be divided proportionately between SREP and SAMAP.

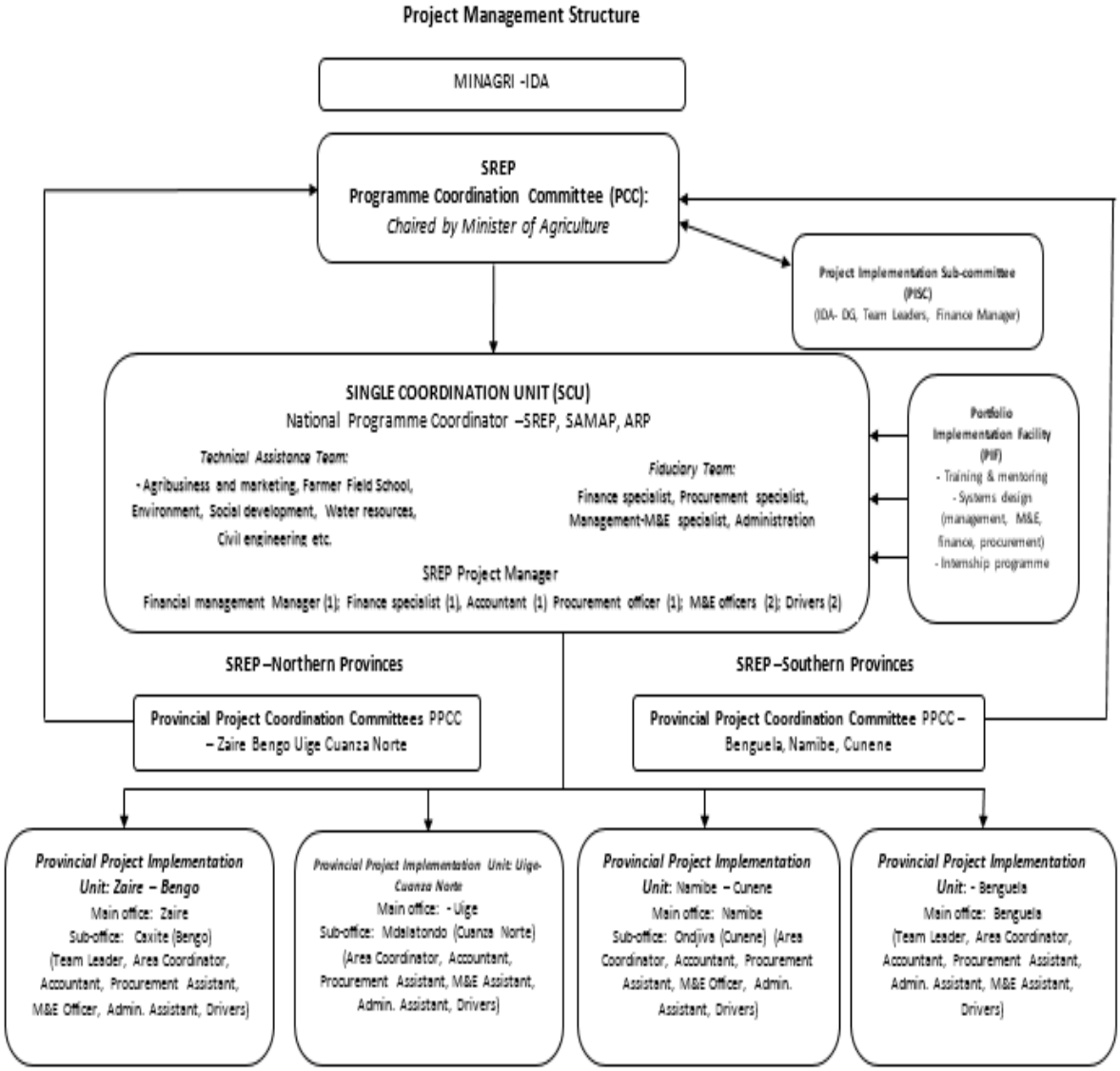
98. **Portfolio Implementation Facility (PIF)**: The PIF will be established to support the SCU by sourcing International/Regional Technical Assistance to set up implementation frameworks and systems and provide on the job training to Angolan counterparts. The PIF will also support national counterparts through training, mentoring and establishing portfolio management systems (in administration and day-to day management, M&E/result reporting, Financial Management and Procurement).[16] An "internship" programme will be established to support Angola in establishing and reinforcing its institutional capacity to attract, absorb and manage external development assistance[17]. Technical assistance will also be provided through the SCU in identified technical subjects – FFS development (agronomy), civil engineering, social development, agribusiness development and marketing.

[15]SAMAP staffing includes a Project Manager, a Financial Management Specialist, a Procurement Specialist, an Accountant and an M&E and Knowledge Sharing Specialist. These positions will be absorbed by the Single Coordination Unit. The SAMAP Project Coordinator will take on the role of Single Coordination Unit, Programme Manager. ARP is being implemented at provincial level through an office in Lubango, Huela. The project team consists of a Project Manager; Accountant; Procurement Assistant; Monitoring and Evaluation Assistant; and Project Assistant with SAMAP playing an oversight role. The fiduciary specialist responsibilities will be extended to provide support to SREP.

[16] AFD, BADEA and IFAD will to provide financial support to the PIF

[17]Each year 18 interns (6-finance, 6-project management, 6-procurement) will be competitively hired to form the Luanda based internship programme and a further 9 interns (3 project management, 3 finance, 3 procurement) will be selected to attend a one year training abroad.

Figure 3: Project Management Structure



Oversight bodies

99. The oversight bodies at two different levels, national and provincial, are described below, and summarised in Figure 4.

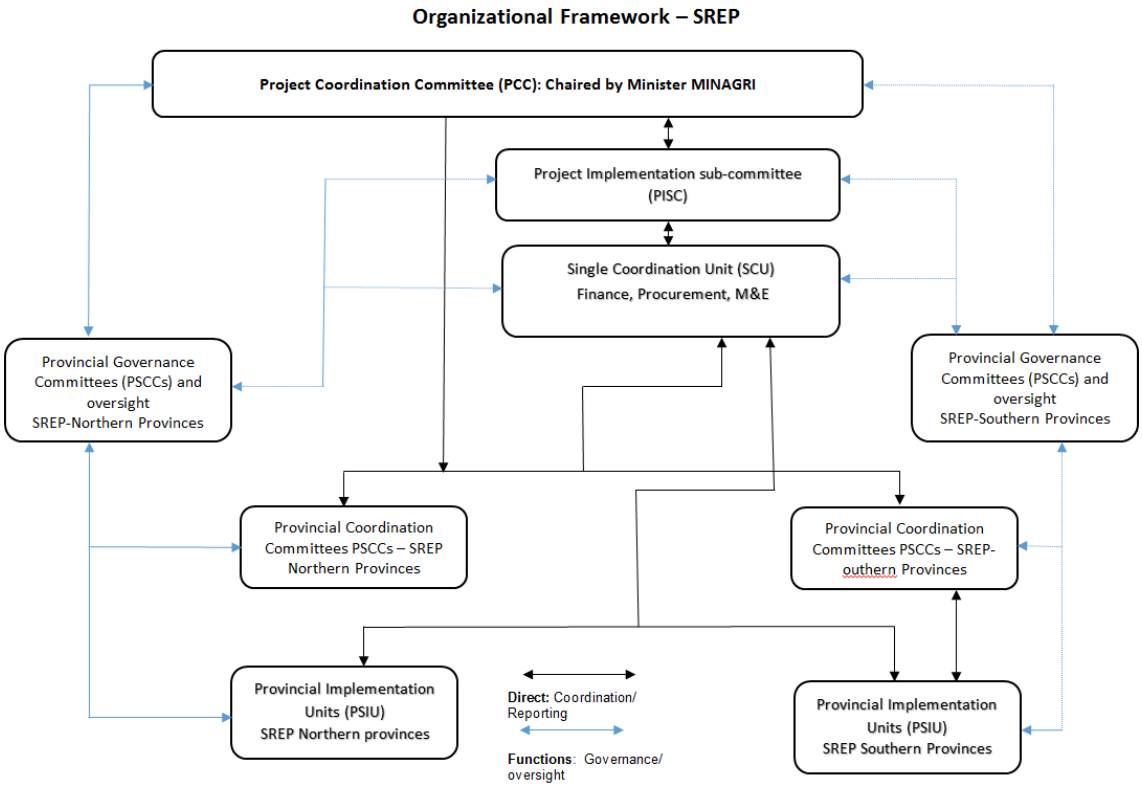
100. **Project Coordination Committee(PCC).**At the national level, MINAGRIF will be supported by a Project Coordination Committee(PCC). The PCC will be chaired by the Minister of Agriculture or his nominee, and composed of membership from institutions with direct relevance to the achievement of SREP's goal and development objective. The PCC will be responsible for the strategic direction, operational oversight of project activities and implementation progress, communication, and overall good governance of the project. It will: a) provide political and strategic guidance and facilitate inter-sectoral coordination for activities not directly under MINAGRI; b) review and approve the Annual Work Plans and Budget for the Project Implementation Teams; and, c) review annual project reports and support problem resolution. The Director General of IDA will be the Secretary of the PCC, which will meet at least twice a year or more frequently, as and when need arises.

101. **Implementation Sub-committee.** Implementation Sub-Committees will be set up for each of the project areas – north and south. The sub-committees will have executive and technical responsibilities. The implementation sub-committees will consist of (at least) the IDA Director General, the Project Manager, the respective Team Leader and the Financial Management Officer. Its task will be to: (i) speed-up decisions and procedures; (ii) approve micro-projects under Sub-components 1.2 and 2.2 that may require central level decision making (based on the feasibility studies prepared by the PIT); (iii) propose the agenda for the PCC meetings and prepare the support documents; (iv) propose the Annual Work Plan and Budget (AWPB) to PCC for analysis and decision; and (v) submit Annual Report of micro projects. The implementation sub-committees will, in addition, include representatives of NGO or civil society and a representative of the private sector, when deciding on the approval of micro-projects.

102. **Provincial Project Coordinating Committee (PPCC).**In each participating province, there will be a Provincial Project Coordinating Committee (PPCC), the composition and tasks of which will reflect those of the PCC. The PPCC will include the Provincial Director of Agriculture, the Provincial Director of IDA and the Area Project Manager, a representative of civil society or NGO, a representative of the private sector and two (minimum) representatives of beneficiaries/producers' organisations. The PPCC will also meet biannually, or more frequently if required. The responsibilities of the PPCC will include: a) speeding up decisions and procedures; b) review and approval of the beneficiary and micro-project selection processes; c) review the provincial level AWPB prepared by the Provincial Directorates of Agriculture and the main area service providers; and d) review the provincial level annual Project implementation progress reports.

103. **Provincial Governance Committees (PGC).** In addition to the PPCCs, PGCs will be established in each of the participating provinces to ensure good governance and accountability during micro-project implementation. They will be composed of local authorities and traditional leaders who will be supported, as and when the need arises, by a representative of the oversight agents. The role and functions of the PGCs will be to oversee implementation from a good governance and accountability perspective. With the micro-projects being demand responsive with the preparation of business plans and micro-project proposals, the process of deciding on the approval of plans/proposals and the selection of beneficiaries could, potentially, generate some grievances. The PGCs will establish a grievance mechanism which will be used to address any complaints that could arise during the course of SREP implementation. The PGCs will keep records of evidences and complaints with minutes of the discussions, recommendations and decisions taken. The PGCs will establish detailed mechanisms for the grievance and complaint process, describing format, language, time for reply and alternative resources, including access to Courts of Law as a last resort after exhausting all the viable peaceful local alternatives/options. Permanent and open dialogue will also be promoted as this is the most suitable way of peacefully addressing any grievances expressed. A team of oversight agents will be designated and entitled to spot-check the approval process at the PGC level to ensure fairness and transparency and will report to the PCC. The PGC for Uige and Cuanza Norte will include as a PGC member a representative of the wildlife authority

Figure 4: Project Organizational Framework



D. Planning, M&E, learning and knowledge management

104. SREP will collect quality data and analyse it in order to monitor project performance and produce reports that inform the country policy makers and development partners on the performance of the project.For monitoring and evaluation to be effective, SREP will use the following guidelines:

- Harmonise its M&E framework with other M&E systems under the IFAD portfolio and especially the SAMAP and ARP projects as well as capturing key indicators that contribute to government action plans and strategies;
- Setup modalities to capture output and outcome indicators on SLM systems, GAP, ecosystem status, and to follow-up on food security enhancement and income increases as well as progress made by vulnerable groups (gender, youth and other vulnerable people);
- Use of Logical Framework and AWPB for planning, monitoring and evaluation;
- Involve beneficiary communities and implementing partners in data collection and analysis;
- Develop learning, innovation and knowledge management mechanisms to support, in particular, policy processes and scaling-up.

105. Planning of project activities will be an on-going and participatory process coordinated by the SCU with support from the provincial and municipality offices of the southern and the northern provinces. Consolidated AWPBs of the two sub-regional offices will be the basis for planning. This consolidated AWPB will report on the project progress at national level. The AWPB, together with the Logical Framework's results-based indicators, will be the basis for monitoring project progress.

Monitoring will capture all four levels of results (activities, outputs, outcomes and impact at development objective and goal level) on a continuous basis. M&E will be will be carried out in specific periods and the findings will be enriched with feedback from the on-going generation of lessons learned, best practices, beneficiary and stakeholder stories (also defined as learning and knowledge management).

106. The AWPB will be the base for implementation and operational control. The AWPB for the first year will be based on the SREP Design Report and its Attachments and will be revised by the project team and PCC at start-up. Training will be given to the SCU, the project team leaders and the PPIU staff, on the preparation of AWPBs. The subsequent AWPB will follow the project overall planning and design with adjustment made when necessary based on recommendations from joint IFAD-GoA supervision missions.

107. The AWPB will be elaborated in collaboration with all the stakeholders. The head of the SCU will coordinate the AWPB process and ensure that all stakeholders are fully involved. The two M&E Officers under the supervision of the head of the SCU will be responsible for coordinating the preparation of AWPB, its consolidation, and presentation to the PCC for validation and submission to IFAD. The Financial Management Officer will provide costs for incorporation in the financing plan and disbursement arrangements. The PIU's Project Manager together with the Financial Manager will prepare the procurement plan. The AWPB approved by the PCC and IFAD will be the instrument giving the SCU the authority to conduct activities and incur expenditures. The Director General of IDA will act as the chairperson of the PCC, while the head of the SCU will be the Secretary of the Committee. The PCC will meet twice a year to discuss issues concerning the project.

108. **Monitoring and evaluation.** A baseline study will be carried out within the first year of project implementation. Another survey will be carried out at mid-term to capture the mandatory/core indicators levels as demanded by the new IFAD Operational Results Management System (ORMS).

109. The SCU Senior M&E Officer will be responsible for planning, monitoring, reporting, evaluation and assessment, learning, knowledge management and communication, as well as ensuring appropriateness and efficiency of implementation related to targeting. An M&E Officer will be recruited to take responsibility for SREP. The M&E Officer, supported by the Project implementation team leaders of the Provincial Project Implementation Unit (PPIU), will ensure that information is collected on a regular basis and registered on a database. Capacity for M&E is quite low in Angola and therefore capacity building will need to be provided, particularly for the M&E officer and assistants for the provincial units. Functional monitoring will be through monthly coordination meetings at the level of the SCU, PIT and PPIU. There will be quarterly implementation review joint meeting of SCU, PIT and PPIU to prepare and validate data needed for progress reports. Results will be submitted in quarterly, half-yearly and annual reports to PCC, PPCC and IFAD. Consultants will be hired to develop an M&E software that will be linked to the financial management software for easy consolidation. Project staff and executing partners will be trained on the use of the software.

110. **Mid-Term Review (MTR).** An MTR will be conducted halfway through implementation (beginning of PY4) to assess the performance of the project, results attained against the established objectives, and the efficiency and effectiveness of SREP management. Recommendations for revisions to the activities and approach as well as the Logical Framework targets will be made if necessary. In order to gather pertinent information for the MTR, the project will need to conduct, at about three months prior, an evaluation of its key outcome indicators to measure progress towards project impact and outputs.

111. **Project Completion Report (PCR).** At the end of the implementation period, a PCR will be compiled following IFAD standards to provide an overview of the accomplishments of SREP.

112. **Learning and knowledge management.** Knowledge Management (KM) will be a process by which value is generated from project intellectual and knowledge-based assets. It will include a detailed plan on how information will be obtained and disseminated through project reports and reviews, development of knowledge products, policy workshops and the use of communication channels. To share lessons learned and promote scaling-up, the PCU is expected to use different types of media and approaches (M&A), such as FFS, farmer field visits, website, radio, video, press releases and articles for local and international newspapers and for IFAD website. The project will benefit from and contribute to the GEF Food Security Programme knowledge network. The regional knowledge network, IFAD Africa, will provide opportunities to participate in regional thematic

workshops, visit sites of similar projects, and guidance for the start-up of KM activities. With support from IFAD, other relevant KM expertise could be mobilized to support the project in developing knowledge products. Tools, such as case studies and stakeholder interviews, will complement the M&A tools described above to deepen the understanding of factors contributing to adoption of SLM practices and success or failure to show impacts on ecosystems services and food security. One of the main purposes of knowledge creation and sharing will be to support policy making by building a comprehensive body of evidence, lessons learned, and good practices. The M&A tools will provide a cost-effective way of building strong cases and inform policy makers for further up-scaling.

E. Financial management, procurement and governance

113. **Overall implementation arrangements.** The Leading Implementation Agency for SREP will be the Institute for Agricultural Development (IDA). The SREP Management Unit will be embedded in the SCU that shall be established by IDA in Luanda to coordinate the implementation of all IFAD projects implemented through MINAGRIF: SADCP-C&H/SAMAP, ARP and now SREP. The SCU will also be responsible for the overall fiduciary management of the IFAD financed projects implemented through MINAGRIF.

114. **Financial Management Staffing**. SREP shall create a small financial management team embedded in the SCU composed of a Financial Management Officer (FMO), a Finance Specialist (FS) and an Accountant, who will be responsible for the day-to-day accounting and financial management arrangements of SREP. The FMO will report to the Financial Controller of the SCU and will work in close coordination with the SREP Component Managers. Four additional accountants will be hired for the four PPIUs. These accountants will respond to the PPIU Area Manager and the FMO at SCU. The sub-offices to be established by IDA at provincial level will only handle small transactions to be managed by the sub-office Administrative Assistant. The selection of the FMO and the FS will be carried out by IDA, in accordance with Government practices for appointment of staff and with IFAD's No Objection. The selection of the SREP Accountant at SCU and the 4 Accountants of the PPIUs will be carried out by IDA, in accordance with Government practices for appointment of staff. The SCU organogram is outlined in annex 1.

115. As part of the overall set-up of the SCU, IDA shall hire an accounting and/or auditing firm with international reputation, and experienced in the project financial management arrangements of IFIs and other bilateral institutions, to provide on-the-job training to project financial management staff. It is envisioned that this support encompasses the first 2 years of project implementation.

116. In addition, a Financial Expert shall be hired as International Technical Assistance (member of the PIF team) to provide training on the job and mentoring to the SCU finance team.

117. **Accounting Policies and Procedures**. The accounting policies of SREP will comply with the International Public Accounting Standards (IPSAS). The Financial Statements will be prepared in accordance with the IPSAS "cash basis" method of accounting. A Financial Management Procedures Manual (FMPM) will be adopted by the SCU, applied to SREP and shall be incorporated as an annex of the Project Implementation Manual. The FMPM will be prepared by the SCU Finance team and will be based on internationally recognised best practices. The FMPM will contain the accounting policies and procedures including a tailored chart of accounts, method of determination of the exchange rates, evaluation of beneficiaries' contributions and Government contributions in kind. The FMPM should also lay down the precise internal control arrangements of the programme. In the context of the SCU, SREP will procure and install the accounting software PRIMAVERA, including the budget module, which is widely used by the IFAD financed projects in the country. Software customization will include direct connection between the workstations at SCU and those at provincial level.

118. **Disbursements Arrangements.** The disbursement methods available to IDA for the withdrawal of financing proceeds from the loan account shall be: advances, direct payments and reimbursement. The ceiling of the Designated Account, the limits of contracts subject to prior review and detail of supporting documentation required to accompany the application for disbursement will be defined in the Letter to the Borrower. Due to severe difficulties in the processing of payments to accounts abroad, and to the difficulty in the availability of USD resources for bank-to-bank transfers within Angola, SREP shall more frequently need to use the direct payment method for contractors and suppliers abroad, and within Angola. As such, the threshold for direct payments will be set at USD 20,000. IDA shall liaise with the Ministry of Finance and Bank of Angola on the opportunity of opening

an offshore bank account for the processing of USD payments to accounts abroad, and once this account is opened, the direct payment threshold will be revised.

119. **Flow of Funds IFAD**. IDA shall open a bank account in USD in Luanda to receive the proceeds of the financing (Designated Account). Mandatory joint authorized signatories of the account will be the SREP Project Director, the FMO or Financial Controller of the SCU and an authorized representative at MINFIN. Two operational accounts, one in AOA and one in USD, will be opened in a commercial bank in Luanda. This second USD account is needed in order to limit the number of operations in the Designated Account in each fiscal year. Authorized signatories on these accounts will include the Project Director and the FMO or Financial Controller SCU. The local USD account shall be closed when the USD off-shore account becomes operational. Another bank account in AOA shall be opened to receive Government of Angola counterpart funds. Four bank accounts in AOA (one per province) will be opened to manage expenditures at local level. The Area Coordinator will have signatory powers with the local accountant managing all the disbursement, accounting and reporting requirements. Detailed procedures shall be outlined in the FMPM.

120. **External Audit**. SREP financial statements will be audited by independent, private audit firms satisfactory to IFAD, and in accordance with International Standards of Auditing (ISA). The selection of the auditor should be through an open competitive process, and an important selection criterion should be experience in auditing projects of IFIs operating in Angola. The auditor's report will be submitted to IFAD no later than six months after the closing of the borrower's fiscal year. The external audit will be conducted in accordance with Terms of Reference acceptable to IFAD. Auditors will be required to issue an opinion on programme financial statements and the audited financial statements will be publicly disclosed as per IFAD's Handbook for Financial Reporting and Auditing of IFAD-financed projects.

121. **Procurement.** SREP's procurement of goods, works and services will be undertaken in accordance with IFAD Procurement Guidelines and "Policy on preventing fraud and corruption in activities and operations". All procurement will be executed only against approved AWPBs which align with the procurement plans, specifying items to be procured under each component, the agency responsible for such procurement, the procurement method to be used (as defined in IFAD Procurement Handbook and Guidelines), and the sequencing/timing and total cost involved. All larger procurements are expected to be through national competitive bidding contracts, with the exception of international competitive bidding for contracts above an agreed threshold, which will use the appropriate World Bank Guidelines and bidding documents templates. All procurements financed by IFAD will be exempt from duties and taxes. IFAD prior review threshold will be established at US$75,000 for goods and works and US$50,000 for consultancy services. These will be described in the PIM with additional requirements of IFAD's Prior Review procedures specified in the Letter to the Borrower. Robust implementation arrangements will be put in place to ensure effective project execution. Timelines included in the approved procurement plan will be closely monitored during implementation to minimize delays.

122. AFD will follow the IFAD procurement procedures. The review of withdrawal applications will be initially conducted by IFAD but disbursement will be done by AFD directly. BADEA will be using their own procurement and disbursement procedures. These are described more fully in Appendix 8.

F. Supervision

122. Supervision and implementation support will be jointly undertaken by IFAD and GoA. During Year 1 supervision will be undertaken every three months. Depending on progress and the level of risk assessed, subsequent supervision missions will be fielded at least twice, but preferably three times a year. Considering the perceived Financial Management risk, IFAD will undertake an additional financial management Implementation Support Mission in conjunction with the other IFAD-supported Projects (AFAP, SAMAP, ARP) in the first two years of implementation. This will support capacity building of financial management staff, as well as on-site review of SOEs, supporting documentation and procurement arrangements. Supervision and implementation support will be based on IFAD's operational modalities and practices. Supervision will not be conducted as a general inspection or evaluation but, rather, as an opportunity to assess achievements and lessons learned and to jointly reflect on ways to improve implementation and increase the likelihood of achieving the Project's objectives. IFAD will also provide implementation support either during the Supervision Missions or as and when needed. Key features likely to require attention by the missions will include: a) preparing the

PIM; b) setting up of a functional M&E system; c) procedures and systems causing implementation and reporting delays; d) the procurement function; e) process of selecting the qualifying beneficiaries; and f) effective delivery of capacity building interventions.

G. Risk identification and Mitigation

123. The overall risk of SREP is assessed as significant due to weak capacity for implementation and fiduciary matters (procurement, financial management, agricultural, veterinary and environmental extension/local services) as well as to limited capacities at community level and environmental and climate change potential impacts. The Table below identifies main risks and proposed mitigation measures to address them.

Table 2: Main Risks and Mitigation Measures

Main risks	Mitigation measures
Limited Public Sector Capacity: The provincial and municipal levels will have important roles in planning, coordination/management and supervision. The municipalities, and communes in particular, have limited capacity in terms of staff numbers, skills, experience and facilities.	Capacity building and technical assistance/training will be provided to IDA and other governmental agencies including MINAMB staff at provincial and municipality level in project design, coordination, monitoring and overseeing.
Limited Availability of Qualified Financial Management and Procurement Staff: The extremely competitive market for the few qualified FM staff might render difficult for the hiring of experienced FM staff, unless competitive salaries are offered.	SREP will receive fiduciary support from the Single Coordination Unit. In addition, IFAD will provide detailed FM training and frequent FM support during the first three years.
Limited Capacity at Community Level: lack of service providers with knowledge and skills for social mobilisation, community development and income generation.	Provision of technical assistance and local level community support. The Project will be responsible for identifying, selecting and training community level staff.
Creation of Dependency Syndrome: The transition between emergency, recovery and longer-term development needs to be managed with care. If this is not properly managed, this could create a dependency syndrome.	A good M&E system will identify households struggling with the transition. These will be supported by the proven individual household mentoring approach to assist them in overcoming the dependency syndrome.
Lack or weak coordination with other Projects: Failure to develop partnerships for local level planning and M&E	Project management will be implemented through Provincial and Municipal departments promoting effective targeting (with regard to areas of focus and beneficiaries) and benefiting from other ongoing projects and experiences. Stakeholder platforms at municipality level will be set up to include implementation partners and service providers to ensure effective coordination
Negative Impacts on the Environment and natural resources management: Implementation of some activities may lead to undesirable consequences on the environment including water contamination, soil degradation, deforestation and wildlife conflicts.	The Project will analyse and minimise negative impacts through the ESMP. Training will be provided on environmental assessment, planning, management and monitoring.
Climate related extreme events: Climate variability continues be to pronounced	Diversification of livelihoods will enhance social resilience, complemented by capacity building of smallholders in climate adaptation to reduce vulnerability to extreme events.
Scarcity of Foreign Currency and Emergence of a Parallel Exchange Market with the parallel exchange market rate doubling the official exchange rate.	Adequate planning and execution of funds flow from Designated Account in USD to Operational Account in AOA to mitigate the risk of eroding purchasing power.
Elite capture of resources intended for the smallholders particularly the investments	PGCs will be established including representatives from traditional and community leaders as well as civil society. Grievance mechanisms will be elaborated.
Co-financing through revolving fund schemes might potentially risk leaving out the poorest and most vulnerable among target beneficiaries,	Criteria will be developed to insure inclusion of the ultra-poor and other beneficiary groups that would include more direct financial support e.g. in the form of (un)conditional

Main risks	Mitigation measures
including women and youth.	cash transfers and/or in-kind assistance may be more appropriate. Consideration will also be given to eliminating the requirement of co-financing for such vulnerable groups, as they may be unable to fulfill it.
Mindset of receiving free inputs from Government remains.	Mentoring and social mobilisation are emphasised. Community groups and the FFS approach will also maximise the social cohesion among the smallholders.
Management challenges due to dispersed nature of activities.	The approach of clustering municipalities will reduce the risk of dispersed activities. In addition the improved mobility of the EDA and the Service providers will improve the reach of the Project.

H. SREP Costs, Financing, Benefits and Sustainability

SREP Costs

124. The total SREP investment and incremental recurrent costs, including physical and price contingencies, are estimated at USD 150 million (AOA 34.5 billion). The table below presents a breakdown of the costs by components.The investment in Component 1: Institutional capacity building in base costs totals USD 85.2 million (59% of base total base costs). Within this first component the investment in public rural infrastructure accounts for USD 62.3 million (43% of base costs) and strengthening capacity for improved services to family members at USD 22.9 million (16% of base costs). Component 2, Family farmer strengthening and Investment in base costs totals USD 37.9 million (26% of base costs). Within this second component, strengthening capacity for family members in base costs totals USD 21.6 million (15% of base costs). Investing in family farming in base costs totals USD 16.3 million (11% of base costs). Component 3 Project coordination and management in base costs totals USD 22.0 million (15% of base costs) of which the SREP Project Implementation Unit (PIU) accounts for USD 15.9 million (11%) and the Single Coordination Unit (SCU)- Portfolio Implementation Facility (PIF) accounts for USD 6.1 million (4% of total base costs). The costing has been done in USD but price contingencies (USD 3.2 million) have been provided. Physical contingencies amount to USD 1.6 million.

Table 3: Project Costs by Component

Angola
Smallholder Resilience Enhancement Project (SREP)

Components Project Cost Summary	(Kwanza Million)			(USD '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
A. Component 1: Institutional capacity building								
1. Strengtening Capacity for Improved Services to Family Farmers								
Investment costs	2,144	2,144	4,289	9,321	9,321	18,642	50	13
Recurrent costs- Extension staff deployment	494	494	987	2,146	2,146	4,291	50	3
Subtotal	2,638	2,638	5,276	11,466	11,466	22,933	50	16
2. Investing in Public Rural Infrastracture								
Feeder road rehabilitation & Maintenance	4,442	4,442	8,883	19,307	19,307	38,614	50	27
Market infrastructure	447	447	895	1,945	1,945	3,890	50	3
Sustainanble land & w ater management	2,273	2,273	4,546	9,880	9,880	19,761	50	14
Subtotal	7,162	7,162	14,324	31,132	31,132	62,265	50	43
Subtotal	9,800	9,800	19,600	42,599	42,599	85,197	50	59
B. Component 2: Family Farmer Strenthening and Investment								
1. Strengthening Capacity For Family Farmers	2,491	2,491	4,982	10,828	10,828	21,655	50	15
2. Investing in Family Farming	1,872	1,872	3,744	8,137	8,137	16,273	50	11
Subtotal	4,363	4,363	8,725	18,964	18,964	37,928	50	26
C. Component 3: Programme Cordination								
1. SREP Project implementation unit	1,833	1,833	3,667	7,969	7,969	15,938	50	11
2. Single Coordination Unit (SCU)-Programme Implementation Facility (PIF)	703	703	1,407	3,057	3,057	6,115	50	4
Subtotal	2,537	2,537	5,073	11,026	11,026	22,052	50	15
Total BASELINE COSTS	16,699	16,699	33,398	72,589	72,589	145,178	50	100
Physical Contingencies	189	189	378	822	822	1,645	50	1
Price Contingencies	355	376	731	1,541	1,636	3,178	51	2
Total PROJECT COSTS	17,243	17,265	34,508	74,953	75,048	150,000	50	103

SREP Financing

125. Total SREP costs, including price contingencies, duties and taxes, are estimated at about USD150 million over the six-year implementation period. IFAD will fund the Project through a loan of around USD 43 million on ordinary terms. The IFAD loan will be divided into two tranches; an initial funding of USD 29.755 million and a second disbursement of USD21.745 million. The second tranche will kick-in in year 3 of project implementation and will be conditional on the performance of the IFAD portfolio. This implies a financing gap of USD 21.745 million or 14.2% of project costs. GoA will finance taxes, duties and contributions to extension infrastructure amounting to a total of USD 10 million, representing about 6.7% of total costs. The estimate of taxes and duties is based on prevailing rates at the time of design. In conformity with the principle that no taxes or duties will be financed out of the proceeds of the IFAD Loan, any changes in the rates of taxes and duties would have to be met by GoA. Beneficiaries will contribute USD 6.5 million, representing about 4.3% of Project costs, and will consist mainly of in-kind contribution (labour[18]). BADEA will contribute about USD 40 million (26.7%) and Agence Française de Development (AFD) a further USD 42 million (28%).

Table 6: Financing Plan by Components (USD'000)

Angola
Smallholder Resilience Enhancement Project (SREP)

Components by Financiers (USD '000)	IFAD 1		BADEA		AFD		GoA		Beneficiaries		IFAD 2		Total		For. Exch.	Local (Excl. Taxes)	Duties & Taxes
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%			
A. Component 1: Institutional capacity building																	
1. Strengtening Capacity for Improved Services to Family Farmers																	
Investment costs	5,518	29.1	-	-	8,394	44.3	1,130	6.0	-	-	3,917	20.7	18,960	12.6	9,485	8,344	1,130
Recurrent costs- Extension staff deployment	2,146	50.0	-	-	-	-	-	-	-	-	2,146	50.0	4,291	2.9	2,146	2,146	-
Subtotal	7,664	33.0	-	-	8,394	36.1	1,130	4.9	-	-	6,063	26.1	23,251	15.5	11,630	10,490	1,130
2. Investing in Public Rural Infrastructure																	
Feeder road rehabilitation & Maintenance	-	-	36,603	88.5	-	-	4,763	11.5	-	-	-	-	41,366	27.6	20,706	15,896	4,763
Market infrastructure	1,150	28.0	-	-	1,749	42.7	384	9.4	-	-	816	19.9	4,099	2.7	2,051	1,664	384
Sustainanble land & w ater management	5,709	27.6	-	-	8,685	41.9	1,646	7.9	617	3.0	4,053	19.6	20,711	13.8	10,364	8,700	1,646
Subtotal	6,859	10.4	36,603	55.3	10,434	15.8	6,794	10.3	617	0.9	4,869	7.4	66,176	44.1	33,122	26,260	6,794
Subtotal	14,522	16.2	36,603	40.9	18,828	21.1	7,925	8.9	617	0.7	10,932	12.2	89,427	59.6	44,752	36,750	7,925
B. Component 2: Family Farmer Strenthening and Investment																	
1. Strengthening Capacity For Family Farmers	6,350	29.3	-	-	9,659	44.5	1,068	4.9	112	0.5	4,508	20.8	21,697	14.5	10,849	9,780	1,068
2. Investing in Family Farming	3,296	19.9	-	-	5,013	30.3	147	0.9	5,771	34.8	2,340	14.1	16,566	11.0	8,287	8,132	147
Subtotal	9,646	25.2	-	-	14,673	38.3	1,215	3.2	5,883	15.4	6,847	17.9	38,263	25.5	19,136	17,912	1,215
C. Component 3: Programme Cordination																	
1. SREP Project implementation unit	3,674	23.0	3,397	21.2	5,589	34.9	733	4.6	-	-	2,608	16.3	16,001	10.7	8,001	7,267	733
2. Single Coordination Unit (SCU)-Programme Implementation Facility (PIF)	1,913	30.3	-	-	2,911	46.1	127	2.0	-	-	1,358	21.5	6,310	4.2	3,158	3,024	127
Subtotal	5,587	25.0	3,397	15.2	8,499	38.1	860	3.9	-	-	3,966	17.8	22,311	14.9	11,160	10,291	860
Total PROJECT COSTS	29,755	19.8	40,000	26.7	42,000	28.0	10,000	6.7	6,500	4.3	21,745	14.5	150,000	100.0	75,048	64,953	10,000

Summary Benefits and Economic Analysis

126. SREP will improve the livelihoods and nutrition status of 218,000 household beneficiaries, create employment at farm and farmer organization levels and boost the development of crop and livestock production and market linkages. SREP is planned for five categories of beneficiaries and benefits flow streams: (i) Benefits exclusively through extension support and FFS; (ii) Benefits of FFS receiving both extension advice plus investment grants; (iii) Benefits to farmers in the form of higher (premium) prices as a result of feeder road construction and rehabilitation; (iv) Benefits from farm and off-farm Income Generating Activities (IGAs); (v) Benefits to youth and women in operating hire service enterprises; and (vi) Benefits from reduced transport costs/efficiency gains as a result of road investments. In addition, benefits will flow from the adoption of SLM practices and application of knowledge related to nutrition, climate resilience and gender empowerment, which are difficult to quantify.

127. **Financial analysis:** The financial analysis of SREP is based on six farm models, derived from ten crop/enterprise models. The purpose of these financial models is to assess whether the proposed improved technology packages are commercially viable and will enable the targeted smallholders to generate sufficient additional income, to increase their food security and resilience to shocks and stresses whist raising their asset base and creditworthiness.

128. **Crop and farm models:** Ten crop/livestock models have been developed for the main crops cultivated by the targeted smallholders: (i) Cassava FFS plus Grants; (ii) Cassava FFS only; (iii)

[18] https://tradingeconomics.com/angola/minimum-wages

Beans FFS and Grants; (iv) Beans FFS only; (v) Maize FFS plus grants; (vi) Maize FFS only; (vii) Sweet Potatoes; (viii) Irrigated tomatoes; (ix) Goats, and (x) Poultry. Based on the observed cropping patterns and farm sizes, six farm models were developed to test the financial viability at potential beneficiary household levels. The six models (below) all show substantial increases in income that should attract smallholders in adopting improved technologies.

SREP-North	**ha**	**Financial IRR**	**NPV (USD'000)**
Bengo/Zaire-FFS only	1.0-2.5	40%	5,835
Uige/Cuanza Norte-FFS only	2.0-2.5	42%	7,013
Bengo/Zaire-FFS + Grant	1.0-2.5	25%	3,850
Uige/Cuanza Norte-FFS + Grant	2.0-2.5	30%	4996
SREP-South			
Farm type 1 - drier areas	0.8	30%	1,916
Farm type 2 - smallholders in wetter areas	1.5	27%	2,504
Off-farm		33	10,244

129. The average cost per beneficiary of SREP is approximately USD 683 per household and USD 133 per person. This is considered reasonable given the high cost structure for key inputs in Angola.

130. **Economic analysis:** The economic cost-benefit analysis aims to assess the economic viability of the proposed project from the overall national economic standpoint. The analysis was conducted over a 20-year period in constant 2018 prices, aggregating additional benefits as derived from the various models developed in the financial analysis. Financial prices were converted to economic prices except where Conversion Factor (CF=1) was justified. The following CFs were used based on analyses conducted by SAMAP and ARP: (i) Labour CF= 0.85; (ii) Improved seed CF= 0.9; (iii) packaging CF = 0.9; and (iv) fertilisers and chemicals CF= 0.85. Economic costs were generated from SREP COSTAB excluding taxes and duties and using constant 2018 prices. Incremental costs after the Project implementation period, in particular for maintenance of irrigation schemes and other infrastructure, as well as costs to follow up farmers were taken into account. An adoption rate of improved technologies of 60% has been used for FFS beneficiaries.

131. **Results of the economic analysis** The Project yields an Economic Internal Rate of Return (EIRR) of 26% and an Economic Net Present Value (ENPV) of US$91.6 million (at 9.35% discount rate). The Project is, therefore, highly profitable from an economic standpoint. A sensitivity analysis was carried out to assess the likely impact of a variation of some key factors on the economic return of the project. It indicates a strong resilience to increases of costs and reductions of benefits. The project would still yield an EIRR of respectively 22.4% and 21.6% if benefits were reduced by 10% and 20%. In the extreme case of benefits being reduced by 50%, the EIRR would establish at 20.4%, a value above the social discount rate. If benefits lag by two years a 20% EIRR would still be achieved.

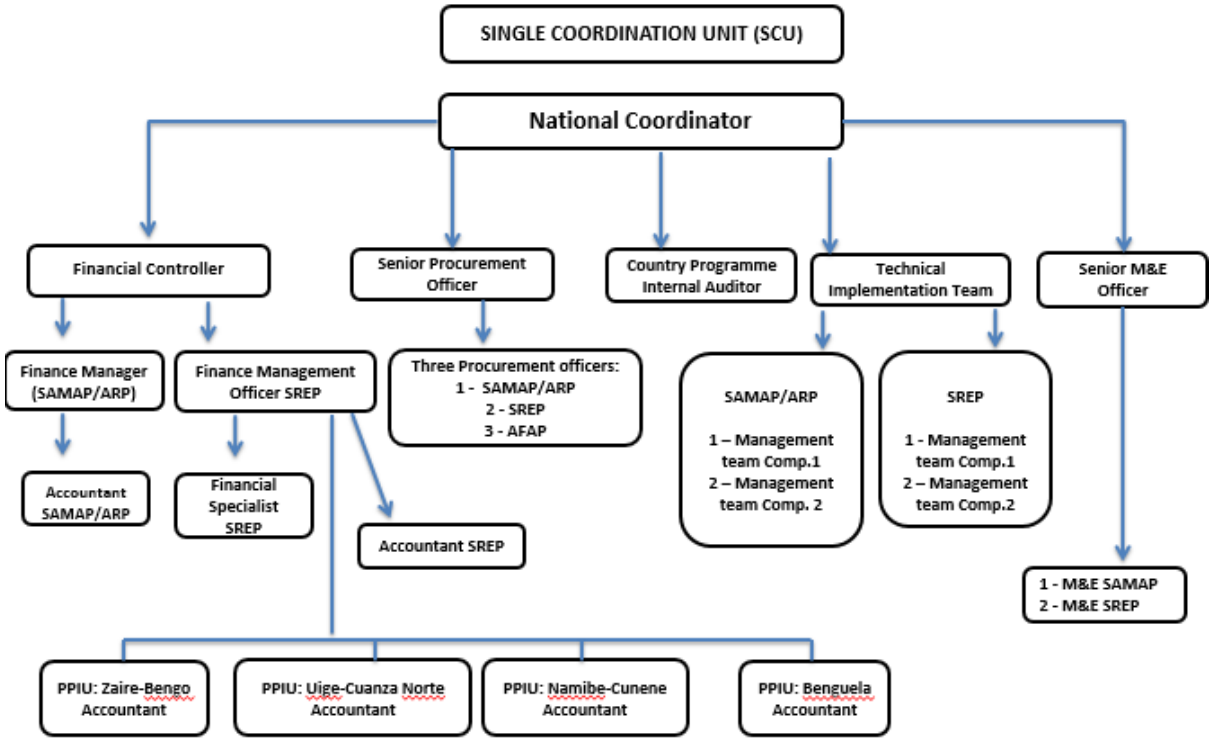
Sustainability

132. Sustainability is built-into SREP through: (i) the FFSs and other extension approaches which will create large numbers of trained farmer facilitators who will continue to provide technical assistance long after the project has ended; (ii) a focus on developing competencies and skills of potential extension workers and service providers; (iii) investment support to smallholder farmers and their organisations to enhance productivity, increase income and develop better linkages with traders, input suppliers and agro-processors; and (iv) enhanced the capacity of IDA staff and technical support services. The support provided to the Government institutions will greatly enhance implementation capacity and will ensure a greater project sustainability.

133. SREP's exit strategy relies on building capacity at different levels; at farmers/FOs level but also at public services, agricultural service providers and technical support service institutions level. Capacity building will be undertaken at the institutional, community and household levels. The skills and capacities required at the different levels will be strengthened to ensure communities are resilient to climate variability and climate change, particularly within the southern region, and that the relevant institutions are able to provide the necessary support and services.

134. SREP interventions will contribute to environmental sustainability through the enhanced resilience and improved community-based natural resources management which will contribute to the strengthening of social networks. The sustainability of the community level management institutions will be ensured through the capacity building and benefits from strengthening the local level networks. In addition, the proposed linkages with municipality-level strategies will also ensure sustainability of the community level structures

Annex 1 Organogram for the Single Coordination Unit



Appendix 1: Country and rural context background

Country and rural development context

1. The Government of Angola (GoA), together with its national and international partners, have made substantial progress following the end of nearly three decades of civil war in 2002 during which much of the country's economy collapsed, infrastructure was destroyed and institutions weakened. Progress has involved programmes aimed at ensuring order and security, revitalising the economy, restoring social services, rehabilitating infrastructure and addressing the threat of climate change.

2. Since 2002, Angola has enjoyed a period of relative peace and political stability. Between 2002 and 2014 the GDP per capita increased from US$2,900 to US$6,800, largely led by oil production. In 2014, the oil sector represented 35% of the national Gross Domestic Product (GDP) and accounted for 95% of the country's total exports. Since 2016, the dramatic decline of oil prices on the world market and a decrease of 3.3% in the daily national production between 2015 and 2016, have caused a slowing down in the GDP growth to 1.1% in 2016, from 8.5% in 2012[19]. The decline in oil revenues prompted the government to accelerate efforts to diversify the economy with a stronger focus on agriculture, industry and services. A stronger emphasis on agriculture aims to increase production and reduce food imports. Angola's institutional capacity, however, has not been restored since the return of peace and bureaucratic hurdles inhibit private sector growth. The government is facilitating private sector involvement and is encouraging financial institutions to support the agriculture sector.

3. **Food Security and Nutrition**: Angola has made significant progress over the last decade in reducing food insecurity and undernourishment. Recent data available indicate that the prevalence of food undernourishment in the total population dropped from 32.1% over the period 2004-06, to 14% in 2014-2016. Over the same time-span, the number of undernourished people dropped from 5.8 to 3.5 million, despite the growth in population[20]. However, malnutrition remains a public health concern with stunting rate of 38% and 65% anaemia prevalence among children aged 6-59 months. Higher stunting prevalence was recorded in rural populations (46%) compared to the urban areas (32%).The associated factors to poor nutrition included poverty, education status of mothers, inadequate daily meal intake and child feeding practices.

4. **Poverty and inequality**. Performance related to social indicators, however, has been mixed. Since 2002, good progress has been made in poverty reduction, primary education, and gender equality, but other social indicators are weak.The poverty rate declined from 62% in 2001 to about 37% in 2009[21]. This was a major achievement, but much more needs to be done under the shared prosperity agenda. The rural poverty rate is 58%, in contrast with urban poverty rate of 30%. In the capital (population five million), the poverty rate is only about 9%. The Gini-coefficient in 2013 was 42.7[22]. The average life expectancy of 51.1 years (HDR 2017). The UN Human Development Index (HDI) places Angola close to the average value for Low Human Development Countries but above the average for Sub-Saharan Africa. The HDI for Angola increased from 0.391 in 2000 to 0.533 in 2015, with the country ranked 150 out of 188 (HDR,2015).

5. **Agriculture and the smallholder sector.**Angola has an estimated 58 million ha of arable land, of which less than 10 per cent has been estimated to be under cultivation with a minimal area under irrigation (2017). Although in the past the country used to be a major agricultural exporter, currently a large share of the food consumed is from imports, although this figure is declining. The shift from net export to net import was due in part to the destruction of the agricultural production and marketing infrastructure during the civil war, and in part to the lack of competitiveness of the national production against imports.

[19] General National Budget 2016
[20] FAO, IFAD, UNICEF, WFP and WHO. 2017. The State of Food Security and Nutrition in the World 2017. Building resilience for peace and food security. Rome, FAO.
[21] Angola 2014", Instituto Nacional de Estatística.
[22] World Bank Indicators

6. Although agriculture contributes only 10% of GDP[23], some 44% of the employed population work in the sector and around 46% of households are engaged in some form of agricultural activity and 6% in fishing (2014 census).The rural poor depend almost exclusively on smallholder family farming for their livelihoods. These farms are largely subsistence-based, characterised by low yields, low prices and low returns to labour and land with low productivity and limited sales. Improving smallholder agricultural production, productivity and commercialisation are hence critical to reduce rural poverty. The northern provinces in Angola are characterized by cassava based mixed food cropping systems, with a cultivated of between 1.5 hectares, closer to the coast and 2.5 hectares, further inland. Cassava is the most important crop grown in the area but other crops include peanuts, beans, bananas, maize and sweet potatoes, all of which are part of the local food diet. The production system in the south is largely agro-pastoral with livestock contributing significantly to the livelihood of rural households. Some 80% of farmers are subsistence smallholders growing maize, millet and sorghum, at low levels of productivity.

7. **Land tenure and access to land:** In Angola all land belongs to the State which determines its final use. In 2004, a Land Law was passed in order to preserve the rights of the rural communities by taking into account the customary land use systems that prevail in the different parts of the country[24]. The law was expected to provide security of tenure for permanent land investments, e.g. small-scale irrigation, managed by community-based groups and associations. In terms of State ownership, agricultural land is regulated upon a private rights basis while natural resources form part of the public right. The law foresees that land for private agricultural investment would be regulated through perpetual land use rights transfers of ownership, sold by auction from the State to private actors. In this way land use rights are transmissible. At the same time, the Land Law subjected those with informal rights to eviction if they fail to apply for a concession in a timely manner.

8. Although in Angola there is no straightforward competition for scarce land, due to the still very low population density, the weaknesses in the land legislation framework, and in the titling processes, have resulted in conflicting interests in parts of the country where encroachment occurs, especially amongst those communities with limited resources and capacities to defend their rights. As part of government policy, cooperative members can receive land rights to the communal land managed by the cooperative. A single title is given to the cooperative as a group. Within the cooperative land transfer can occur between members on an informal basis. Title can be given by MINAGRIF and for areas of land up to 100 hectares can be issued at Provincial level.

9. Formal land administration in the country is rudimentary or non-existent and institutional capacity is lacking at all levels and the situation is worse outside major urban centres. The infrastructure needed for formal dispute resolution and promoting the rule of law is weak. Informal dispute resolution does occur within communities with village elders and other leaders adjudicating and mediating conflicts. While these traditional authorities are often successful in dispute resolution, they are not always doing so in accordance with formal law, but rather they are following tradition. There does not appear to be a significant formal (local or provincial) government judicial dispute resolution mechanism available. There are courts at the provincial level, but these courts are under-staffed and underfunded, and they are not accessible to most citizens. Furthermore, the majority of citizens do not understand the court system and do not have access to courts as a practical matter.

10. FAO has for decades supported the GoA through the *Angola Land Programme* in the development of the country's land tenure management framework that takes into account the historical occupancy and uses of local communities. Over the last 10 years FAO and GoA in collaboration with national NGOs and CSOs (including Global Vision Angola) have piloted participatory land-use mapping and planning and delimitation processes with local rural communities and supported them in obtaining the title to their lands in the center and south of the country (Huila, Benguela, Bié and Huambo provinces). As a result 20,000 hectares of land used by local

[23]Average calculated based on available national data from 2006 to 2012. Source: Government of Angola (2016) Nota de Imprensa N. 02 – Contas Nacionais Provisórias 2014 e Preliminares 2015, Instituto Nacional de Estatística

[24]These include: residential, traditional shifting agriculture and transhumant grazing, forestry, access to water and communication ways use.

communities have been titled and a manual for participatory land-use mapping, planning and land titling has been developed which is now being taken up by the World Bank supported project. A draft study of Angola's legal framework have been prepared for further discussion which looks at constraints and needed reforms for implementing the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries, and Forests in the Context of National Food Security (VGGT)* in Angola.

11. **Gender.** More than a fifth (23%) of agricultural households are headed by women. Women are responsible for 70% of traditional subsistence agriculture and 24% of commercial agriculture. In general, women are not entitled to own property on equal terms with men. The right of women to own land often depends on their marital status and cumbersome administrative procedures is another constraint.

12. **Youth**: The government defines youth as people aged 15 to 35, which represent 32.4% of all citizens in the country. School completion rates decrease after the primary level and progressively drop along the education pathway. Youth unemployment is pronounced at 46%, against a general unemployment rate of 24% and rural youth face a major challenge of seeking alternatives to subsistence farming while having limited employment skills. Migration levels are highest for youth within the age group of 25 to 35 years (24.5%). Poverty, however, is lower among the 15 – 35 year olds than any other age group. A significant number of households are youth headed.

13. **Climate change:** Agriculture, in particular in the south, is increasingly vulnerable to climate change and extreme climatic events, such as droughts (e.g. 2012-16) and floods (e.g. 2017) caused by El Niño and La Niña climate events. Over the last 30 years, there was no substantial change in annual mean temperature. For the future, projections from global climate models suggest a medium-strong increase in temperature. According to estimates, mean annual temperatures will increase by 1.2 - 3.2 degrees Celsius by 2060, and the total rainfall through "heavy events" is projected to increase (UNDP, 2008). This is expected to increase the occurrence of floods. For the end of the century a warming in the range of 1.4°C to 4.6°C (tropical regions) and 1.6°C to 5.1°C (semi-arid regions) is likely (compared to the reference period from 1971 to 2000). Furthermore, a strong increase in the duration of heat waves as well as a strong decrease in cold spell length is projected (Climate Fact Sheet, 2018).In 2015, following prolonged dry spells yield losses were estimated at 75% in Cunene, Huila and Namibe provinces (PDNA, 2015). Climate change affects, albeit less so, the more humid northern provinces with increased temperatures, lower rainfall and a shorter growing season predicted.

14. A climate risk analysis undertaken by the Africa Climate and Development Initiative illustrated the effects of climate change such as reduction in the length of growing seasons, particularly affecting maize and other cereals. The Intergovernmental Panel on Climate Change (IPCC) has warned that decreases in crop yields of 10-25% and more may be widespread by 2050[25]. The increased frequency of warmer nights in most regions is also damaging for many crops, with observed impact on rice yields and quality. The number of crop varieties has decreased dramatically over the latter part of the 20th century, raising concerns for adaptive capacity, genetic vulnerability and nutritional diversity. The government has placed high importance on improving the resilience of food and agricultural systems to shocks and threats from climatic and other causes.

15. Evidently the agriculture, coastal zones, forests, water resources, ecosystems and biodiversity are extremely vulnerable to impacts resulting from the extreme climatic events, which will pose not only serious livelihood and direct health risks but can also affect national food security (INDC). Though the southern part of Angola is more affected by climatic events such as droughts and intermittent floods, the northern regions also have adverse impacts from late onset and cessation of rains and prolonged dry spells. Rising temperatures are also impacting on agricultural productivity. Mean annual temperature is projected to increase in the region by 1.2 to 3.2°C by the 2060s. Climate models predict Angola will experience more extreme weather events, an expansion of arid and semi-arid regions, seasonal shifts in rainfall, localised floods, increased wildfires, sea level rise, increased rainfall in the northern parts of the country, changes in river flows and changes in sea and lake

[25]IPCC, 2014. http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/WGIIAR5-Chap7_FINAL.pdf

temperatures (NAPA). SREP will support communities to cope with extreme climatic events such as droughts, prolonged dry spells and increasing rainfall variability.

16. **Land degradation**: Angola is rich in natural resources, although land degradation and soil fertility decline is becoming a more acute problem especially in the south. Land degradation is mainly due to unsustainable agricultural practices, the over-grazing of rangelands and deforestation and the unsustainable use of forest resources and deforestation. The vagaries of the weather and inadequate land and water management have accentuated soil erosion and land degradation, which has resulted in increased sedimentation in streams and water points (which are crucial for the agro-pastoral system), a decrease in soil depth and fertility, diminishing soil organic matter and a reduction in its water and nutrient holding capacity. Cattle keepers in the south require more land to sustain their herds due to drier conditions and decrease in grassland productivity. Deforestation rates over the last three decades have been high, even though movement of people from rural to urban areas have allowed for forest recovery in areas previously under cultivation. The primary causes of deforestation are charcoal production, land clearing for agriculture and fire. The annual rate of deforestation over 2005-10 was around 0.21% (FAO, 2013).

17. **Market infrastructure and demand**: Only a limited part of agricultural production reaches the market due to poorly developed infrastructure (especially roads and electricity). Market demand is high for most food crops and opportunities exist for expanding smallholders' production. However market outlets in rural areas are insufficient and marketing systems that were severely disrupted during the civil war, are yet to be strengthened.

18. **Rural finance**: The financial sector is competitive, but also highly concentrated, with five banks holding over 75% of market share. The scope of products and services offered are mostly focused on traditional mass-market banking products and loans are concentrated in a few sectors in Luanda province. The banking system is not accessible to a majority of the population and credit is largely concentrated in urban areas. A few banks have microfinance portfolios, with loans mostly extended under government or donor-supported programmes. The share of agriculture in the loan portfolio of banks is minimal, mainly short term and mostly benefiting commercial farmers. The family farming sector, which among other challenges cannot present land titles as collateral, is largely excluded from these opportunities.

19. GoA and the central bank, Banco Nacional de Angola (BNA) have focused, in recent years, on economic diversification, deepening financial inclusion, developing rural financial systems, microfinance and financing agriculture and agri-business. However, to date the financial sector is yet to give due attention to these emerging areas, and there is still a long way to go to achieve a diversified economy with more inclusive, sustainable and robust growth. Policies need to be refocused and the systems re-engineered to foster structural transformation. Both public and private institutions, including the banking sector, have to work closely to increase production and productivity of smallholder farmers by facilitating access to finance, technology and markets.

20. **National development policies and strategies**. The government of Angola has been fighting poverty on various fronts including: (i) the 2005 Anti-poverty Strategy (ECP); (ii) the 2009 National Strategy for Food and Nutrition Security (ENSAN); (iii) the Integrated Municipal Program for Rural Development and the Fight Against Poverty (PMIDRCP), which resulted from the 2010 merger of the ECP and ENSAN; and (v) the National Development Plans (PND) 2013-2017 and 2018-2022.

21. The main policies of GoA to reduce poverty were first embodied in the ECP followed by the ENSAN. The main goal of the ECP was to cut the country's poverty level in half by 2015 and to consolidate peace and national unity through the sustained improvement of the living standards of all Angolans. It also highlighted rural development with a focus on the improvement of food security and the revitalization of the rural economy and the reconstruction of infrastructure. The goal set out by ENSAN was to ensure that all Angolans would have at all times physical and economic access to food of adequate quantities and variety to permit them to contribute to the human, economic and social development of the country.

22. In 2010, the ECP and the ENSAN were merged into the PMIDRCP, which aims: "to reduce levels of extreme poverty particularly in rural areas, promoting access to basic public services and

turn Angola into a prosperous country with social justice." This programme, implemented countrywide and led by the Secretariat of Social Issues of the Presidency, includes several social development programmes. Both ECP and ENSAN were also reflected in Angola's, PND, which established as main goals, the promotion of economic growth and increased employment. In 2012, the latter assigned between 1 to 3% of public expenditure to MINAGRI, and less than 0.99% to the Ministry of Fisheries and Aquaculture.

23. Angola's PND, 2013-2017, placed emphasis on intensifying the process of economic diversification supported through investments in rehabilitating and developing new infrastructure. In addition, the government targeted the development of macroeconomic policies to stimulate private investment and the creation of a more efficient and flexible public institutional structure. The latter include restructuring of the central and local administrative bodies for purposes of rationalisation of resources and increased efficiency.

24. The PND, 2018-2022, aims to promote the Country's socio-economic and territorial development at national, sectoral and provincial level. It provides a framework for the implementation of long-term strategic development options as set out in the Long-term Strategy (ELP) Angola 2025.The strategy covers two focal areas: i) Human Development; and ii) Welfare and Sustainable, Diversified and Inclusive Economic Development. The PND was prepared in close coordination with the sectorial and provincial planning bodies, strengthening the decentralization process and aiming at greater local level ownership of the national development planning process. The PND provides a framework to restore confidence in the economy and embark on a path of diversifying the economy and promoting economic growth and development. Over the planned period the Angolan economy is expected to grow by 3% annually, with the agricultural sector a leading driver of growth (average rate of 8.9%).

25. **Agricultural sector policies**. The PND 2018-2022, and Medium Term Development Plan for the Agricultural Sector (PMDSA), 2018-2022, anchored the goal for agricultural development to the sustainable use of natural resources and the improvement of competitiveness, while aiming at the achievement of food security and self-sufficiency and taking advantage of market potentials. The medium-term plans include four strategic objectives that address agriculture, livestock, forestry and cross-cutting issues including capacity development and services to producers. Not least, the second strategic objective, in both 2013-2017 and 2018-2022 medium-term plans, focuses on the development of family farming. With regards to agricultural research and extension, the Government acknowledged the limited resources and coverage; and in the more recently, referred to Farmer Field Schools as the method for technology transfer.

26. **Environment and climate change policies**. In more recent years, national policies also started integrating among their concerns, the sustainable management of natural resources and the need for climate change adaptation. The PND included environmental management among its priorities, as one of the pillars for the national sustainable development; and adaptation to climate change through small scale irrigation development was part of the priorities for the agricultural sector. At the same time, the medium-term plans for the agricultural sector have moved from full reliance on the abundance of the national natural resources, to an incipient and more cautious attention to the need for their sustainable management. The Ministry of Environment (MINAMB) has the mandate to ensure environmental protection and climate change adaptation. As part of the strategy to mainstream environmental and climate risk management and demonstrate activities in specific sectors, ecological centers have been constructed in Namibe, Cabinda, Cuando Cubango and Huambo Provinces. The centers will serve as capacity building and technology demonstration sites for a wide range of stakeholders including technicians and smallholder farmers.

27. Specific programmes and plans for addressing climate change include the Intended Nationally Determined Contributions (INDC, (2015)) that takes a longer term perspective to include mitigation targets and reiterates the priorities set out in the National Adaptation Programme of Action (NAPA (2011)). These priorities include promoting sustainable land and water management for increased agricultural yields, soil erosion control through organic methods, diversifying crops to less climate sensitive cultures and implementing water-harvesting systems in drought-prone areas. The SREP will directly contribute to most of these priorities through activities for soil and water conservation, improved water resources management and crop diversification.

Appendix 2: Poverty, targeting and gender

Poverty

1. Since the end of the civil war in 2002, Angola has registered progress in its efforts to increase economic growth and social wellbeing. The country saw a steady economic growth, with per capita Gross National Income (GNI) increasing from US$ 330 in 2002 to US$ 4,470 in 2014 (UNDP, 2015 human development report). The dynamics of the Angolan economic growth is associated with the exploitation of natural resources mainly mining and hydrocarbons, where oil accounts for 30% of the GDP, 95% of total exports and 50% of public revenues. Agriculture accounts for only 12% of GDP and employs nearly 70% of the population (African economic outlook, AfDB, OECD, UNDP 2017).

2. The poverty rate declined from 62% in 2001 to 36.6% in 2009 but remained high in rural areas, at 58% (Instituto Nacional de Estatística). Recent figures indicate that 43.4%[26] of the population live below the poverty line (less than 1.25 USD per day).[27]As shown by the 2014 Household Budget Survey, the incidence of poverty is also associated to high fertility rate[28](larger families), low education rate, unequal distribution of wealth, low access to infrastructure as well as inequality in income which was 28.9% in 2015

3. Education rates are low with enrolment in tertiary education at only 8.2% for women and 10.6 % for men. This is largely because of the large household sizes and high fertility rates. Some 42 percent of Angola's 25 million inhabitants were under 15 years old in 2015[29] and many of these children do not complete their education. The country`s education expenditure is around 3.5 percent of GDP. Because of lack of education, many young people cannot find good jobs to help improve their standard of living.

4. The pace of poverty reduction is not as fast as might have been expected, due to the underperformance of the agricultural sector (12% of GDP) compared to the rest of the economy. The basic needs poverty rate declined from 49% in 2002 (55% in rural areas) to 44% in 2014 (51% in rural areas), while food poverty declined only marginally from 13.2% in 2004/2005 to 13% in 2010.

5. Despite the country's vast mineral wealth and agricultural potential, the Human Development Index (HDI) for Angola rose from 0.391 in 2000 to 0.533 in 2015 with a ranking of 150 out of 188 countries. This increase was due to an increase in life expectancy (58.1 to 61.2years), GNI (USD 4 941 to UAD 6 822) and years of schooling (4.1 to 4.7) due to the enrolment of the younger population.

6. Urbanization is an increasingly common trend. From 1990 to 2014 the percentage of rural population dropped from 75% to 37% ((Instituto Nacional de Estatística, 2014), on account of the high rural exodus. Many youth leave the village to urban areas in search of better living conditions. The main causes being high unemployment, low agricultural productivity and production and low incomes from farming.

7. According to the 2014 census figures, despite its low contribution to GDP[30]some 44% of the employed population still work in agriculture related activities. Some 23% of agricultural households in rural Angola are female headed and women are responsible for 70% of the family farm subsector production.

[26]Population Well-being Survey - IBEP, 2008-09),
[27]UNICEF statistics on Angola, http://www.unicef.org/infobycountry/angola_statistics.html
[28]A high birth rate is problematic because it strains resources. The more children a family has, the harder it is for families to give all children the nutrition their bodies need. This is evidenced by the high child mortality rate. One in four children do not reach their fifth birthday. A lower birth rate increases the number of female workers and output per capita
[29] weform.org/doc/WEF-GGGR-2017
[30]Average calculated based on available national data from 2006 to 2012. Source: Government of Angola (2016) Nota de Imprensa N. 02 – Contas Nacionais Provisórias 2014 e Preliminares 2015, Instituto Nacional de Estatística

8. The incidence of HIV infection in 2016 was 1.9, which is comparatively low compared to the regional average of 4.3. However, the rate of infection in the urban areas and in certain rural areas is on the rise. With little being done to address HIV/AIDS concerns the disease is beginning to impact negatively on agricultural production.

9. Malnutrition is still a concern and 30% of children less than five years are suffering from stunting, and 16% are underweight. The rural poverty rate is 58%, in contrast with an urban poverty rate of 30%. The Gini-coefficient in 2013 was 42.7. The rural areas have more chronic malnutrition (46%) compared to urban areas (32%).

10. However, Angola has taken measures to reduce rates of disease and infection, such as child vaccinations in the capital. But Angola still has one of the lowest health expenditures in the world at 3.1 percent of the country's GDP. Due to Angola's poor healthcare, the life expectancy remains low at 61 years old.

11. A number of social and economic welfare indicators reveal significant gaps in the living standards between residents of urban areas and those in rural areas. Only 32% of rural population have access to good drinking water compared to 67% in the urban areas; 7% of rural households have access to electricity, compared to 64% of households in urban areas, and finally, 11% of households have access to improved sanitation facility compared to 46% in urban areas (2015-16 Angola Multiple Indicator and Health Survey)

Gender, youth and other fragile social categories

12. **Overview of gender inequality in Angola context**. Despite efforts made to integrate gender into Government policies and strategies, wide gender inequalities persist. The country ranked 123 from 140 countries according to the WEF, gender gap report 2017.[31] Women face under-representation in formal politics which has negatively affected representation in the country's decision-making bodies (Human Development Report, 2015). At local level, women representation in decision making is also extremely low. In rural areas of Angola, only 26% of women can read and write compared to 65% of men. In Parliament, 38% of members are women and out of 18 governors, 8 are women (44.44%). At municipal level, from the 163 administrators 43 were women (26%) and among the 163 deputy administrators just 34 were women i.e. 21% (MINFAMU, 2016Relartarioanalitico de genero de Angola).

13. The Population and Housing Census carried out in 2014 in Angola reveals that 51% of the population is made up by women. However, despite being the majority, women are more likely than men to be poor and illiterate and they usually have lower access to medical care, property ownership, credit, training and employment. The GNI per capita (2011 PPP $) shows a value of 5.073 for women and 7,527 for men and the expected years of schooling are 8.7 for women and 14 for men. The literacy rate for men is 80% while that for women stands at 53%. Distribution of income among men and women is disproportionate, with men owning all major means of production such as land, livestock and financial capital, while women provide most of the labour. Women-headed households have lower incomes compared to those headed by men. The disparity is consequently, quite marked.

14. In addition to these examples there are other discriminations that refer to access to basic resources and services (land, education, health etc.) as well as the level of violence faced (39% of women experienced physical violence since the age of 15) and 44% of married women experienced physical or sexual violence committed by their husband or partners (INE, 2014).

15. About 1.9% of Angolan population is HIV positive (2.65% of women and 1.2% of men), with the highest prevalence in Cunene (6.1%) and the lowest in Zaire (0.5%). HIV prevalence by age shows that the most affected are between the ages of 30-45 which constitute the main work force. HIV affects the output of women who participate in all household farming activities and household chores.

[31]World Economic Forum : https://www.Weforum.org/doc/WEF-GGGR-2017

Women's average age at first marriage is 19, over five years earlier than that of men[32] with 30% of women aged 20 to 24 years getting married or entering into union before the age of 18 and having an average of 6.2 children. Age at first marriage is significantly higher among more educated women. Also, only, 13% of Angolan women use family planning. This coupled with the prevalence of undernourishment, have a negative impact on their health and education

16. **Gender policies.** With regards to the Promotion of Gender Equality, the general objective of the National Development Plan (PND) is the promotion of equal opportunities, rights and responsibilities for men and women in all areas of economic, social, cultural and political life. Its policy measures aim to promote the full realization of human rights and fundamental freedoms for men and women, promote all equal-opportunity aspects in employment policies, including reducing occupational segregation and helping reconcile work and family life, as well as counter the persistent under-representation of women in all decision-making spheres, promote equal access and full enjoyment of social rights for men and women, eliminate gender disparities in primary and secondary education by 2017 and at the other educational levels by 2025, promote equality in civic life and contribute to change gender roles and stereotypes.

17. Angola is in compliance with its international commitments, namely the United Nations Committee on the Elimination of Discrimination against Women (CEDAW), the Protocol to the African Charter on Human and Peoples' Rights regarding the Rights of Women in Africa, the SADC Gender and Development Protocol, the Solemn Declaration on Gender Equality in Africa, the United Nations Convention on the Rights of the Child and the Beijing Declaration and Platform for Action to which Angola is a party.

18. The Ministry of Social affairs, family and the promotion of women developed a gender policy and the implementation of strategy for the development of rural women. The document comprises a set of actions that respect and encourage positive cultural values, promote solidarity, non-discrimination and effective participation of men and women in political, economic, social, sports and cultural activities. Despite all these policies and actions, customary law still favors men with regard to the control and access over production resources (land, labor, credit. etc.)

19. **Youth.** SREP will define youth as per the African Union's broader definition, which encompasses individuals aged between 15 and 35. By this definition, youth make up over 26% of Angola's population, with a youth dependency ratio of 93.

20. Statistics show that the majority of youth reside in urban areas. The rural areas were highly affected by the civil war having a devastating effect on the physical and social infrastructure, particularly in terms of education and health. Equally, it disrupted the agricultural economy that was the foundation of their livelihoods and the dominant cultural mode of life for a majority of rural Angolans. Left with few life choices, a large number of rural youth continue to migrate into urban areas where some go to school and gain formal employment. Migration levels are highest for youth within the 25 to 35 years age group (24.5%). Most of the household heads in Angola are made up of men. Some 42% of the heads of household are below 34 years of age and 52% between the ages of 24 and 44 years old (INE,2014). Youth unemployment is pronounced at 46%, against a general unemployment rate of 24%. The youth in rural areas are informally employed in subsistence agriculture and are involved in family-based livelihood activities such as handicraft, fishing, or small shops. Youth seeking to start their own enterprises are faced with challenges in obtaining access to credit, and education levels are also low, with only 37% of young men and 28% of young women aged 15-24 having attended secondary school or higher education, as of 2010. Poverty, however, is lower among the 15 – 35-year-olds than any other age group.

21. Overall, 0.9% of Angolans between the ages of 15 to 24 are HIV positive. HIV prevalence is higher among young women (1.1%) than young men (0. 7%). HIV prevalence among youths is twice as high in urban areas than in rural areas, 1.2 vs. 0.5.[33]

[32] Statistics show that fertility is higher with women with little or no education 7.8 children compared to women with secondary or higher education 4.2 children. These larger families often lead to low living conditions and poverty. (INE:2014).

[33] Source; 2015-2016 multiple indicator and health survey (IIMS)

22. In order to create job opportunities for youth, it is necessary to provide them with some financial support in the form of matching grants and full grants to promote rural activities and job creation. However, engagement of youth in business development needs further support to build their technical and managerial capacities in relevant domains. This may include business training to engage in agricultural activities. Specialized training or technical assistance could focus on a variety of agribusiness topics such as crop production, distribution, processing and sales. Social mentoring will be done to enable all members of the community to support youth development by enabling their access to productive resources.

23. **Other fragile social categories**. These categories are mainly disabled persons and ex-combatants.

- **Disabled persons.** Angola has a total of about 656,258 disabled persons of which 56% are male and 44% female,[34] representing about 2.5% of the population. Of these, 56% are found in the rural areas. These handicapped persons are made up of those with intellectual impairments and physical ones including the blind, deaf, dumb, and paralysed and amputees. However, the main causes of handicaps are diseases 42(%), followed by the war and mines victims (35%), and finally the other handicap groups (congenital, work, home, car accidents and others,). The horrors of the civil war led to severe physical and emotional stress resulting in human handicap and physical suffering. In 2011 the government put in place a law mandating the social inclusion of handicapped children and the regulation of open spaces for individuals with disabilities. These handicapped persons are also organized into 18 federations and associations, to represent their social categories and advocate for more support from the state and development partners. They are involved in all walks of life and those in the rural areas live on agricultural and livestock production. In May 2014 the government 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.

- **Ex-combatants.** The civil war in Angola lasted from 1975 to 2002 and resulted in the demobilization of close to 80,537 ex-combatants in all the 18 provinces of the country. The total number of ex-combatants in the target area is 29,762 representing 37% of total ex-combatants in Angola. In 1995 the Government created a ministry in charge of Former Combatants and Motherland Veterans. An Inter-ministerial Commission for Coordination of Socioeconomic Reintegration Actions of Ex-Combatants and Homeland Veterans was formed so as to support the integration of these ex-combatants into civil life. Its specific role was to provide support in the domains of Health, Finance, Agriculture, and social affairs.

SREP Gender strategy.

24. **Gender analysis of production activities and decision making in rural households.** Men and women in the rural areas of Angola have differing roles both at household and community levels. Commercial agricultural production and cattle rearing is mainly a male responsibility, while women are in charge of food crop cultivation, e.g. leguminous, beans, sweet potatoes, cassava. Men are mostly involved in land preparation, mechanisation and irrigation activities and are responsible for trading cattle, cutting, hauling and selling timber from forests and fishing. Men are also employed in mining and carpentry. The primary role of women is to maintain the household and raise children, grow and prepare food, keep poultry and goats, and collect fuel wood and water. Women also work on farms by providing labour for tillage, planting, weeding, harvesting and forest food gathering. A lot of energy and time is spent processing produce for home consumption and for sale. This work is often either underpaid or unpaid and time consuming. Women usually manage to earn a small income for themselves by selling vegetables from home gardens and forest products (firewood, charcoal, wild fruits).The income is spent mainly for manufactured products, family food needs and children's education. Officially, women have equal land rights to men, but in practice customary laws are followed. Men have rights to land through inheritance and women, through marriage, albeit restricted to land used for food crop only. Farms run by female-headed households tend to have less labour available for farm work because of the limited resources to hire labour. Female smallholders have

[34] INE survey; 2014

little access to loans compared to their male counterparts since they do not generally have control over the types of fixed assets needed, as collateral for loans.

25. **Education, technology and information.** Women are more illiterate than men in all of the municipalities targeted. The average years of schooling are 8.3 for women and 14 for men. Women are also less likely to have access to information and to improved technologies.

26. **Gender issues related to food security**. The lack of ownership access, and control of livelihood assets, and the effect of HIV AIDS, and illiteracy negatively affect women's food production and increase their food insecurity. In general, women's role in *food utilization* for food security is critical as they are typically responsible for food processing and preparation and therefore are crucial to the dietary diversity of their household and overall nutrition status of the family.

27. **Gender differences and climate change impacts.** Although climate change impacts on land resources and food availability in general, men and women perceive them differently[35].While women perceive droughts in terms of water shortage for domestic use, men tend to perceive it in terms of lack of pasture for livestock. This causes men to migrate in search of green pastures. The ARP (Agricultural Recovery Project) design mission in the south perceived this migration as a major issue because men tend to set up families in new places and do not return. As men exit, women move into agriculture and the inequities in rights over resources including land, water, trees, livestock, grazing and fisheries raise serious constraints to the sustainability of their families.

28. **Gender, youth, disabled, and ex-combatants mainstreaming in SREP components.** In light of the premises described above and of the context specific gender analysis, SREP activities will address the problems of food and nutrition insecurity in the northern provinces as well as the challenges of climate change experienced by provinces in the south, through the adoption of a gender-responsive approach[36].In general, the project will target 40%[37] of women and 26%[38] of youths as well as 2%[39] of ex-combatants and 5%[40]of the disabled. SREP gender strategy will be mainstreamed in all the three components within the 2 sub-projects as described below.

29. **Proposed interventions**: The project will adopt training approaches that increase women's participation (i.e. increasing the use of female extension staff and trainers; selecting appropriate materials, language and media; and ensuring that the timing and venues are also convenient for women). Specific topics particularly important to women will be added in the FFS curriculum such as awareness raising on nutrition and diversification in the family diet, Family planning methods, maternity health care, and the prevention of HIV AIDS.

30. SREP will provide trainings for women and youth in group formation, leadership skills, confidence building and negotiating skills to enhance gender balance at institutional level which currently is very low due to illiteracy in women. Gender awareness trainings will be conducted at community level through FFS to increase general understanding about the importance of including women in investments to build resilience of family farms.

31. Considering the gender gaps highlighted above, and in particular the i) unequal access to resources (land, water, credit) in favour of men, ii) women's low levels of literacy and numeracy, iii) lack of business development and management skills, and iv) limited voice, leadership and decision-

[35] ARP design mission findings show that men tend to focus more on fodder for animals and water for farming and production; whereas women focus on food and drinking water for their families as well as on their increased work burden. Men usually migrate in order to secure income.

[36] A growing body of evidence demonstrates that more equal gender relations within households and communities leads to better agricultural and development outcomes, including increases in farm productivity and improvements in family nutrition. (World Bank, FAO and IFAD, 2015).

[37] 40 % of women will be targeted by the project. Despite the fact that women account for about 51% of the rural population they usually illiterate and face a lot of challenges; Reduced access to production resources.

[38] From calculations using the 2014 housing survey. The youths represent 26% of the population

[39] Though the ex-combatants represent just 0.003% of the population, 2% will be targeted due to their high vulnerability

[40] Though the disabled represent 2.5% of the population, 5% will be targeted due to their high vulnerability

making capacity in associations and cooperatives and other groups, the project will support the following initiatives: a) develop women's and youths' in community planning and sustainable land management; b) educating women and men about ownership and inheritance rights, including land; c) developing and strengthening the business and entrepreneurship skills of women and youth in particular in small livestock, aquaculture, apiculture, and trading. For women, in particular, the Project will assist in the acquisition of cassava and maize milling machines and improved cooking stoves. This will reduce the time women spend in milling cassava and maize as well as cooking for the family and give room for other productive activities. Improved storage and packaging technologies to extend shelf life will contribute to increasing cassava root and maize availability and reliability, stabilizing prices and facilitating market access and improve income. Youth will also be offered a range of income generating activities, and in particular providing support services such as mechanization, herbicide spraying, as well as seed agents.

Targeting

Project area and geographic targeting process

32. **Project Area** – The SREP focus area will comprise of 7 Provinces - three in the southern part of Angola (Cunene, Benguela, Namibe) and four in the north (Zaire, Uige, Bengo and Cuanza Norte). These provinces are all characterised by high poverty rate, malnutrition, food insecurity and vulnerability due to climate change. The area in the north has a high agricultural potential (sufficient land, favourable climate and good soils.). Thirty-five (35) municipalities have been targeted in the 7 provinces. Twenty-two from the north and thirteen from the south.

33. The 7 provinces have a population of 5.8 million, some 23% of the country`s total. The population of the target municipalities is 3.5 million - 12% of the country and 74% of the population of provinces concerned. These areas all have a high incidence of poverty.

34. In the north, the main criteria for the selection of the municipalities are: (a) a high incidence of food insecurity and vulnerability; b) a potential for agricultural development; (c) a high population density; and d) geographical contiguity to maximise efficiency of project operations.

35. In the south the project will build on the recovery efforts of ARP (Angola Recovery Project). These provinces have been the most affected by drought and floods due to climate change. SREP will help build longer term resilience in the three provinces.

36. In terms of crop production, the project area can be divided into three zones with the following characteristics:

- **The Northern zone** (Cuanza norte, Bengo, Zaire, Uige) is a tropical dry to humid forest area with annual rainfall greater than 1500 mm. Cassava is the main staple covering 75% of area planted. Other crops include mixed cropping of millet, groundnuts and sweet potatoes. This zone has the most productive land in Angola. However, crops are grown mainly for subsistence with very little excess for sale.

- **The Central zone** (Benguela) falls under the tropical plateaus with an altitude, between 1000 and 2500 metres. These plateaus have rainfall between 1250 and 1500 mm/year and an average temperature between 18-20°C. Maize is more suitable here and it is cultivated in association with other traditional crops such as beans, sorghum, millet, groundnuts and sweet potatoes.

- **The Southern zone** (Namibe, Cunene). It has a dry climate ranging from a tropical desert (Namibe) to tropical dry savannah (Cunene) with low rainfall of 200 mm/year on average and an average yearly temperature of 20-22°C.) Livestock production is mainly developed in this zone. Food crops mainly include sorghum and millet. The soils in this desert climate zone suffer from the combined effect of erosion by rains and sun shining and are generally less fertile. Most households located in this zone are vulnerable to climate shocks (drought and

flood) and face declining yields and declined livestock production due to increased land degradation and changing rainfall patterns.

37. The detailed agro-ecological and livelihood characteristics of the project target area are summarized in the table below.

Table 7 : Agro-ecological and Livelihoods characteristics of the Project Target Area

Province	Municipalities	Agro-ecological zone	Crop production and food security.	Main Problems	Coping strategies
Cuanza north	Ambaca; Samba cajui; Lucala; Cazengo; Cambambe	Consist of savannah grasslands and scrub brush with pockets of deciduous forest. Precipitation is around 800-1,200mm per annum. Rains last from October to April with a dry season from May to August. Average temperatures range from a minimum of 16° Celsius to a maximum of 32 ° Celsius.	Mainly savanna forest and market-oriented cassava and fruits (plantain and sweet/table banana, pineapple, etc.). High agricultural productivity due to soil fertility and abundance of water. But agricultural potential insufficiently valued.	Excessive rainfall and flooding occur during the rainy season; Strong winds and storm occur during the dry season. Human and wild life conflicts occur from February to April and during the dry season. Crop pests and diseases such as cassava mosaic and banana wilt occur annually throughout the year. Low crop prices especially for cassava.	In addition to cassava farming, collection of wild foods, sale of local crafts for the less poor. Sale of livestock and reliance on self-employment such as trade. **Obs**: IDA thinks that cereals such as sorghum and millet can also be promoted for food and animal feed, which can be sold in southern provinces affected by droughts.
Uige	Quitexe; Uige; Mucaba; Bungo; Damba; Maquela do Zombo; Sanza pombo; Mucaba	This zone is on the high-altitude plateau. Vegetation is broad leaf and hard wood forests (The area includes the great Maiombe tropical rain forest in Cabinda province. Precipitation is around 1,000-1,400mm per annum. Rains normally commence in October and last until April with a dry season from May to August. Average temperatures range from a minimum of 20° Celsius to a maximum of 32 ° Celsius	Tropical forest cassava, banana coffee. High agricultural productivity due to soil fertility and abundance of water. But agricultural potential insufficiently valued.	The main hazards are excessive rainfall, flooding, strong winds and storms, human-wild life conflict, crop pests and diseases, such as cassava mosaic and low prices of crops especially of coffee	Collection of wild foods and sale of local crafts and help from family members
Zaire	Mbanza Congo; Cuimba; Nogui; Tombocco	This zone is on the high-altitude plateau. Vegetation is broad leaf and hard wood forests. The area includes the great Maiombe tropical rain forest in Cabinda province. Precipitation is around 1,000-1,400mm per annum. Rains normally commence in October and last until April with a dry season from May to August. Average temperatures range from a minimum	Tropical forest cassava, banana coffee. High agricultural productivity due to soil fertility and abundance of water. But agricultural potential insufficiently valued.	The main hazards are excessive rainfall, flooding, strong winds and storms, human-wild life conflict, crop pests and diseases, such as cassava mosaic and low prices of crops specially of coffee.	Collection of wild foods and sale of local crafts and help from family members

Province	Municipalities	Agro-ecological zone	Crop production and food security.	Main Problems	Coping strategies
		of 20° Celsius to a maximum of 32 ° Celsius.			
Bengo	Nambuangongo; Dembos-Quibaxe; Dande; Pango-aluquiem	The topography of this livelihood zone is characterized by highlands in the north, rolling hills in the center and mainly lowlands towards the south. The vegetation is forest and grassland. There are two distinct seasons: rainy season from September to April and a short dry season from May to August. Temperatures reach a maximum of about 30-35° Celsius and minimum of 20-25° Celsius.	Transitional lowland. Maize, cassava, beans (The main food crops grown are maize, cassava, sweet potatoes, groundnuts, beans, bananas, and vegetables; citrus fruits are grown on a smaller scale. The livestock kept are mainly goats and a few poultry. There is no significant cattle ownership, even among the better-off group.). High agricultural productivity due to soil fertility and abundance of water. But agricultural potential insufficiently valued. need diversified livelihood options at household level	The main hazards are excessive rainfall, flooding, strong winds and storms, human-wild life conflict, crop pests and diseases, such as cassava mosaic and low prices of crops especially of coffee. (with respect to coffee I would say low productivity and quality of products)	Collection of wild foods; Sale of local crafts and help from family members; (migration to urban and suburban Lunda city is also a coping strategy for Bengo citizens)
Benguela	Chongorai; Ganda, Cubal, Balombo	The zone lies on the coast line, stretching along Namibe, Benguela, Kwanza Sul, Kuanza Norte, Zaire and abinda Provinces. It is characterized by arid and semi-arid conditions in the south, the topography is characterized by a narrow coastal flatland plain with an altitude of 0-400 meters, which rises abruptly to an inland plateau. Vegetation cover is mainly grass and woodlands with pockets of mangroves, steppe and old stands of olives and oil palms dating from colonial days. Precipitation ranges	Coastal fishing, horticulture and non-farm income. Medium food security risk, need diversified livelihood options at household level.	Rough seas during the rainy season· Invasion by large numbers of seals as pests during the rainy season. Sea floods with salty water flooding into fresh water during the period March to April. Oil spills occur throughout the year. Vegetable crop pests and diseases occur during end of rainy season in March to April	Labor migration to urban areas such as Luanda; Trading in manufactured goods; Reliance on self-employment

Province	Municipalities	Agro-ecological zone	Crop production and food security.	Main Problems	Coping strategies
		from 50-100mm per annum in the arid and semi-arid south increasing to about 800mm in the tropical north particularly in Zaire and Cabinda Provinces.			
Namibe	Tombwa; Virei, Mocamedes, Camucuio, Bibala	Lies in the southern area, within the arid and semi-arid agroecological zones. Has a unimodal rainfall pattern, with average precipitation of about 200-400mm per annum. There are two seasons, the rainy season which lasts from mid-October to March and the dry season from April to early October.	Southern livestock, millet and sorghum. High food security risk due to semi-arid conditions and low crop productivity need diversified livelihood options at household level	Livestock diseases occurs during the dry season. Reduced forage availability, lack of water availability for livestock, reduced market value due to affected livestock health, loss of livestock Low food prices occur during harvest season. Drought events are becoming more frequent instead of the usual 10 years cycle with dry spells registered once in two or three years during the last 10 years.	Sale of labor and collection of wild fruits for the poor and for the better off. Livestock sale and migration to Namibia border.
Cunene	Cahama; Curoca; Cuvelai; Ombanja	Lies in the southern area, within the arid and semi-arid agroecological zones. Has a unimodal rainfall pattern, with average precipitation of about 200-400mm per annum. There are two seasons, the rainy season which lasts from mid-October to March and the dry season from April to early October.	Southern livestock, millet and sorghum. High food security risk due to semi-arid conditions and low crop productivity. Need diversified livelihood options at household level	Livestock diseases occurs during the dry season. Reduced forage availability, lack of water availability for livestock, reduced market value due to affected livestock health, loss of livestock Low food prices occur during harvest season. Drought events are becoming more frequent instead of the usual 10 years cycle with dry spells registered once in two or three years during the last 10 years.	Sale of labor and collection of wild fruits for the poor and for the better off. Increased livestock sale and migration to Namibia border.

Target Groups and Subgroups

38. **Target groups.** Overall, the project will target: (i) food insecure subsistence smallholder farmers most of whom cultivate less than 2 hectares of land but having potential for production and productivity increases; (ii) small and stable family farms with some level of organisation, mainly through associations, producing at subsistence level with the potential to graduate into market-oriented production with focused direct support; (iii) women (at least 40% of beneficiaries) and youth (at least 25% of beneficiaries) organised to carry out processing, marketing and service provision income generating activities; and (iv) other rural vulnerable groups such as the disabled persons and ex-combatants will receive specific attention to facilitate their social integration in agricultural production and economic activities.

39. In the north SREP will target around 152,000 households i.e. 760,000 persons. In the south project has as target of 65,400households reaching around 327,000 persons. The four main target subgroups are described below:

- *Food insecure subsistence smallholder farmers*. This is the most representative of the agricultural producers found in the area and include the most vulnerable groups i.e. women, youth, the disabled and ex-combatants. Food insecure smallholder farmers account for approximately 70% of the project area. Subsistence farmers generally own less than 2ha of land with between 0.5 and 1 ha in production. These households are essentially characterised by: (i) low production and productivity of the main crops (cassava, banana, peanuts, sweet potatoes, maze…etc.); (ii) vulnerability to climate change; iii) lack or low access to production factors (land, improved inputs, water and capital); (iii) limited access to mechanisation; (iv) weak organisational capacity; and (v) low income levels. In general, the target group does not often produce enough to cover their food needs and, in the south, are highly vulnerable to climate shocks. The project's primary objective for these farmers is to increase production for home consumption and sales in local markets through adapted and good production technologies and practices (conservation and climate smart agriculture and GAP),improved access to water and inputs and enhanced income generation.

- *Market-oriented family farms with some level of organisation*. These are family farmers with diversified farming systems. The category accounts for approximately 30% of the farming population in the project areas. Some of farm households have up to 5 ha of farm land and are able to produce surpluses for the market. They are normally able to fulfil their own family consumption needs and are able to secure seeds, casual labour and access to animal traction (albeit at a limited extent. They also lack, agricultural inputs, irrigation systems, access to credit and markets and extension services which impact their agricultural production, productivity and livelihoods. The objective for this group is to increase production outputs through the use of improved technologies in the north; conservation and climate smart farming in the south and income generation through access to markets.

- *Women and youth*. Women, in particular heads of household, widows and young women are socially, culturally and economically disadvantaged but are responsible for ensuring the well-being of their families by securing a large part of the household income from agricultural activities. SREP will promote specific activities for women and youth organized into groups for processing (using labour saving technologies), marketing and service provision. Other activities targeting women concern nutrition where women are at the centre of food preparation for the family. Particular attention will be given to the youth who lack opportunities in rural areas leading to their migration to urban centres.

- *Other vulnerable groups (The disabled persons and ex-combatants)*. The disabled are a significant disadvantaged social group due to their physical and/or mental disabilities compared to the rest of the population. The ex-combatants are more elderly between the ages of 50 and 80 and are both socially and economically disadvantaged. This will be targeted through training and capacity building activities linked to, service provision, IGA and off-farm income opportunities.

40. **Targeting strategy**. The targeting strategy follows closely the national and IFAD targeting approaches and guidelines. These targeting mechanisms ensure the participation of poorerrural households, whilst being inclusive of so-called 'better- off' smallholder farmers and specific vulnerable target groups. The mechanisms include: (i) geographic targeting, (ii) self-targeting; and iii) direct targeting. Project design includes empowering, enabling and procedural measures to promote sustainable socio-economic development with particular focus on the youth, women and other vulnerable groups (ex-combatants and the disabled).

41. **Geographic targeting**. The selection of the 7 provinces and 35 municipalities has been country-driven and is consistent with national priorities. At least 90% of the project's beneficiaries will come from households falling into a sub-group of *food insecure subsistence farmers that include women and youth*.

42. In the north, based on national priorities, SREP focuses on geographic areas and municipalities with: (a) a high incidence of food insecurity and vulnerability, b) a potential for agricultural development; (c) a high population density; and d) geographical contiguity to maximise efficiency of project operations.

43. In the south, criteria for targeting include areas with a high concentration of environmental degradation, food insecurity and poverty as well as areas and households affected by floods and droughts. Within the municipalities, the project will target communes that are vulnerable to food insecurity. The 13 selected municipalities in the south are low income households that work in farming or pastoralism, of which over 18 percent are expected to be organised into Farmer Field Schools by the beginning of implementation. SREP will complement the activities of ARP in the Benguela and Cunene provinces. In Namibe, SREP will build on the recovery activities of the FAO RETESA project which terminated in June 2008 (Land Rehabilitation and Pasture Management in Agro-Pastoral Production Systems).

44. **Self-targeting**. The farmers' field school (FFS) approach will ensure self-targeting. After receiving information on the FFS approach, smallholder farmers in the selected municipalities and communes can decide if they want to become member of a FFS. The project will support the establishment of as many FFS as requested by the farmers. Learning process and tools in the FFS will place emphasis on women and youth empowerment. For a second target group, attention will be given to organising women and youth (including the disabled) into smaller interest groups following participatory processes to ensure that project interventions will be demand-driven and respond effectively to needs of the beneficiaries.

45. **Direct targeting** of youth, women, ex-combatants and the disabled will also be implemented through established quotas ensuring that all of these groups are represented within the project main activities. As noted, above, the project will target 40%[41] of women and 26%[42] of youths as well as 2%[43] of ex-combatants and 5%[44]of the disabled:

a) The different groups of FFS members should include at least 70% coming from households in the food insecure subsistence farmer subgroup. At project level, at least 40% of women, 26% youth,5% disabled and 2% ex-combatants will be represented in the field school training activities (FFS/FBS/Junior FFS).
b) The same proportions of women, youth, disabled and ex-combatants will be targeted to participate in community natural resources management, water harvesting and sustainable land and water management at landscape and farmer field level, in the south.
c) The same proportions will participate in cooperative business planning, investment in production, diversification and market development in the north.

[41] 40 % of women will be targeted by the project. Despite the fact that women account for about 51% of the rural population they usually illiterate and face a lot of challenges; Reduced access to production resources.
[42] From calculations using the 2014 housing survey. The youths represent 26%of the population
[43] Though the ex-combatants represent just 0.003% of the population, 2% will be targeted due to their high vulnerability
[44] Though the disabled represent 2.5% of the population, 5% will be targeted due to their high vulnerability

Criteria for inclusion of women and youth

46. Criteria for determining the eligibility of women and youth for group level investment support are: (a)completion of the first year of FFS/FBS/Junior FFS training and/or specific group level training around a common interest which may fall outside the interests of the mainstream FFS members; (b) group members follow good governance practices, follow a savings first principle and have dynamic leaders and members who respect the rules established by the groups; and (c) groups are willing and able to provide matching grant contributions for implementing envisaged micro-projects.

47. For non-group members, transparency in their selection should be ensured by involving local leadership and local influential persons in the community in selecting beneficiary households. Some of the criteria that will be used in the selection of Project beneficiary households and communes include: a) communes within the target municipalities selected to include vulnerable households and food insecurity (and the south vulnerable to drought); b) households that are most vulnerable (economically and socially) and that have not received assistance from other programmes; c) households with signs of malnutrition; d) size of the households; e) female-headed households; f) youth headed households g) youth that are not integrated in the schooling system; and h) youth that are unemployed.

48. Selection criteria for households eligible for individual mentoring include:

- Willingness and capacity to respond to the mentoring process
- Few household assets
- Many dependants, including caring for orphans, the chronically ill, persons with disabilities and/or the elderly
- Headed by women or children
- Limited or no income-generating activities
- Access to land and/or other natural resources that are not being used productively
- Poor nutrition and shelter, malnourished children, and socially isolated from community and development activities
- Women and children are the main sources of family labour
- School dropouts (before completing primary school)

49. **Implementation**: The Technical Assistance team of the SCU will consist of an International consultant in Social Development supported by two national consultants – for the north and south, respectively. However, implementation of the targeting strategy will be the responsibility of the entire project technical team: central project management unit staff, municipal and provincial officers and field level service providers. The TA cadre will train IDA staff at all levels, and other service providers. At start-up, Projectstaff and technical service providers will be trained in approaches to targeting, social inclusion and gender mainstreaming. .Ultra-poor households will be selected through community participation and mentored so that they can participate in development initiatives. Data will be collected at field level in collaboration with the FFS facilitators and social mobilisers on: (i) the number of beneficiaries including women, youth, disabled, ex-combatants; (ii) the level of participation of the different target groups in the planned activities; and (iii) the impact of project interventions on the poverty / vulnerability of beneficiaries. Compliance with targeting in accordance with the strategy will be a criterion for selecting and renewing contracts / partnership agreements with stakeholders and project staff. The National Consultative Council for ex-combatants, as well as women's associations / organizations and disabled associations and youth associations will be directly involved in the project targeting activities.

50. **Empowerment and capacity building measures** will complement the self-targeting and direct targeting strategies. The measures will be mainstreamed at all levels of the project:

(a) Household level.

- Reduce women's unpaid workload (e.g. in collecting water and fuel wood and weeding, and harvesting, and processing, as well as child caring and nutrition) through the adoption of labour-saving post-harvest and value adding practices such as milling machines for processing of cassava and maize. Other activities could include, agricultural mechanisation

especially for female headed households and the use of fuel efficient cook stoves and the availability of water points, especially in the south, for household consumptive use. These interventions will reduce enormously the time women spend in gathering firewood, cooking, fetching water and planting and processing of food.

- Encourage division of labour among household members. Children and men will be encouraged to participate in certain household chores such as gathering firewood, cooking, fetching water. This will be incorporated to the FFS curricula.
- Encourage household members to assist the disabled and ex-combatants in tasks that they may have difficulty performing.

(b) Community level

- Raise gender awareness at provincial (and commune) level to enhance understanding of the importance of including women, youth, the disabled and ex-combatants in rural development. This will also be done through social mentoring at the community level.
- Mobilize women, youth, the disabled and ex-combatants, to actively participate in project activities.
- Increase community-based consultation on public investment in infrastructure and Good Agricultural Practices relating to environmental management, climate change and land degradation processes.
- Establish and/or strengthen FFSs, farmer associations and cooperatives and networks by providing financial literacy and leadership training in selected production and post-production activities, as well as small entrepreneurship development for the women and youth (e.g. milling machines, apiculture, aquaculture, vegetable production). Youth will be encouraged to participate in service provision and farming and non-businesses such as repair and maintenance service workshops, transportation, construction as well as the processing of traditional medicines from plants and trees, and other non-timber forest products- s wild fruits, mat and basket making. Tailoring and carpentry workshops, mushroom cultivation amongst others should provide opportunities for the disabled.
- Work with women leaders in communities through mentoring processes for vulnerable groups and individuals.

(c) Service delivery

- There will be climate change monitoring and data analysis, vulnerability analysis and mapping, identification of adaptation measures for family farmers relevant in the different agro-ecological zones, and the availability on time of climate forecasting and establishment of an early warning drought and floods system.
- Information will be made available on community organisation, FFS establishment, facilitation and curriculum development, climate change awareness raising and adaptation measures relevant for family farmers and their cooperatives; complementary irrigation and establishment of water users associations (WUA), community natural resources management, water harvesting and sustainable land and water management at landscape and farmer's field level (mainly for the south); and cooperative business planning and development (mainly for the north).
- Farmer Field School curricula will be elaborated to take into consideration special needs of smallholders, women and youths to reflect Sustainable Land Management (SLM) and GAP practices for improved production and food security.
- The GALS approach in FFS will be adopted.

51. **Enabling measures** will be implemented through the sensitisation and training of government staff (i.e. National, Provincial and Municipality level staff on i)the establishment and strengthening of groups and associations; (b) enhancing the skills of beneficiaries in agricultural production, transportation, processing, and marketing; and (c) assisting beneficiaries to prepare development plans and investment proposals (Subproject proposals);d) training in SLM and climate change

adaptation; e) biodiversity conservation; and f) monitoring and evaluation of project achievements against expected results[45]

52. Gender-sensitive training delivery processes will be applied, by selecting suitable location, language, timing and duration of the trainings; training couples and entire households rather than just single spouse and ensuring language and literacy levels that reflect the abilities of the participants. (see Attachment 1 – Targeting Checklist).

53. **Procedural measures;** Procedures have been put in place for the effective management of key project activities such as functional and financial literacy, as well as entrepreneurship training for small holder farmers. Procedures and conditions for application and selection of households to receive matching grants and participate in the revolving funds will be simplified for ease of beneficiary understanding particularly for the most vulnerable. Application forms and subproject proposal formats will be prepared and made available in Portuguese with possible translation into local languages, as necessary, in particular for illiterates.

54. **Gender Action Learning System (GALS).** The proposed adoption of the Gender Action Learning System (GALS) aims to facilitate addressing unequal gender and social relations and enhancing ownership of project activities by the target groups. GALS is a versatile methodology that uses a set of tools that can reach both literate and illiterate people, it can be integrated with a variety of interventions (such as rural finance, natural resource management, value chain development), and can be used for households and groups and in FFS. In SREP it will be applied in the context of FFS, where at least 90% of the beneficiaries participating in the FFS should come from households in the food insecure subsistence farmer subgroup.

[45] The targeting performance will be monitored using participatory M&E and assessed at mid-term review. All data will be disaggregated by sex and age as appropriate, with due qualitative analysis. Gender-sensitive indicators will be part of the Results and Impact Management System (RIMS) data collection and reporting.

Attachments to Appendix 2 (SREP Poverty, targeting and gender)

Attachment 1 - Targeting checklist

Targeting checklist	Design
1. Does the main target group – those expected to benefit most – correspond to IFAD's target group as defined by the Targeting Policy (poorer households and food insecure)?	Yes, primary beneficiaries of SREP are smallholder farmers with high incidence of food and nutrition insecurity and vulnerability to climate change. The geographical areas targeted in the south are among those facing the greatest threat of climate change with recurrent floods and droughts. For the north the targeted areas are those having the greatest agricultural potential in terms of availability of land, climate and soil.
2. Have target sub-groups been identified and described according to their different socio-economic characteristics, assets and livelihoods – with attention to gender and youth differences?	SREP target group comprises four main subgroups: i) (food insecure subsistence farmers with access to less than two hectares of land but having potential for production and productivity increases; (ii) market oriented family farms with some level of organisation, mainly through associations, with access to up to 2-5 hectares of land producing at subsistence level with the potential to graduate into a market-oriented level; (iii) women and youth organised to carry out production, processing, marketing and service provision income generating activities. The project will target 40% of women and 26% of youths; (iv) Other rural vulnerable groups such as the disabled persons (5%) and ex-combatants (2%) will received specific attention by the project to facilitate their social integration in agricultural production and economic activities.
3. Is evidence provided of interest in and likely uptake of the proposed activities by the identified target sub-groups? What is the evidence?	For the south SREP will add to the ARP recovery activities building more long-term resilience for people in the climate change vulnerable provinces. ARP was designed to augment recovery of the drought affected target households by building on the emergency operations conducted by government and Development Partners. SREP in the south will similarly build on the recovery efforts of ARP and other development partners to build longer term resilience to the vagaries of climate change. Interventions aimed at strengthening the community and household productive infrastructure whilst supporting the development and diversification of rural livelihoods. In the north, the project activities were designed in a participatory way together with IDA officers the ministry of Agriculture who represented the interests and needs of their communities. The design field mission in April 2018 came out clearly with the needs of the population which were 1) increased of mechanisation and irrigation systems, ii) improved soil health and increased productivity of agro ecosystems through the use of GAP; iii) diversified and climate resilient production systems that increase all-season income generation. iv) diversification of income
4. Does the design document describe a feasible and operational targeting strategy in line with the Targeting Policy, involving some or all of the following measures and methods:	
4.1 **Geographic targeting** – based on poverty data or proxy indicators to identify, for area-based projects or programmes, geographic areas (and within these, communities) with high concentration of poor people;	Targeting strategy. The geographic targeting has been used to select provinces and municipalities with high climatic shocks for the south; Food insecurity and poverty, and high agriculture potential for the north. The selection of the 7 provinces and thirty-five municipalities has been country-driven and consistent with national

Targeting checklist	Design
	priorities.
4.2 **Self-targeting** – when good and services respond to the priority needs, resource endowments and livelihood strategies of target groups;	The project main aims are to address the priority needs of the *Food insecure subsistence agro-pastoral farmers* by increasing the production for home consumption through improved access to water and conservation and climate smart farming for the south; and improved GAP for the north, and some selling of surplus for income generation. SREP also aims to address the needs of the mostly food secure *subsistence farmers* by diversifying production and improving on their income generation through access to markets with a diversified choice of products.
4.3 **Direct targeting** – when services or resources are to be channelled to specific individuals or households;	SREP activities will use quotas as follows: ▪ (40% women; 26% youth; 5% disabled; 2% ex-combatants) to ensure women and youths and other vulnerable group are represented among the membership and/or leadership of producer groups, cooperatives, FFS, trade associations, WUA. etc. ▪ Introduce technical training specifically targeting women and youth such as training on co leadership skills, business planning, functional and financial literacy confidence building, and entrepreneurship and negotiation skills, maternal health care, nutrition. ▪ Promote women and youth visits, exchange programmes at FFS and other Associations.
4.4 **Empowering measures** – including information and communication, focused capacity- and confidence-building measures, organizational support, in order to empower and encourage the more active participation and inclusion in planning and decision-making of people who traditionally have less voice and power;	SREP activities will aim to: ▪ Reduce women's unpaid workloads through labour-saving technologies, such as irrigation systems, minimum tillage, processing facilities (milling machines and huskers), efficient cook stoves, water points etc. ▪ Encourage women`s participation in the executive of mixed associations and FFS; At least 30% should be women.) ▪ Disseminate public information about the project to ensure activities and services are accessible to all and to enhance transparency; ▪ Raise gender awareness in the community through introduction of certain topics such as the distribution of labour in households during trainings in the FFS and other associations. ▪ Mobilize women, youths, disabled, ex-combatants to actively participate in project activities as for improved livelihoods through the use of Quotas" and mentors; ▪ Increase community-based consultation on public investment in infrastructure and research related to GAP and climate change; ▪ Establish and/or strengthen producer groups, associations, FFS and networks, providing financial literacy and leadership training for each vulnerable group and support the development of the small businesses (e.g. apiculture, aquaculture, processing, Transportation, and basket making); ▪ Integrate gender sensitisation into the training of agricultural staff and extension workers and farmer training programmes.
4.5 **Enabling measures** – to strengthen stakeholders' and partners' attitude and commitment to poverty targeting, gender equality and women's empowerment, including policy dialogue, awareness-raising and capacity-building;	SREP activities will aim to: ▪ Support national level authorities to help reduce climate shocks by using GAP and SLM practices; ▪ Ensure gender-orientated training sessions (selecting a suitable location, timing and duration; training couples and other family members on certain aspects of family and home care instead of just one person;

Targeting checklist	Design
	▪ Sensitise and train government staff (i.e. national, provincial, Commune), agricultural, research; service providers, microfinance institutions, the SCU, PIT, PPIU and other implementing partners on gender empowerment and social inclusion. ▪ Encourage the recruitment and training of female extension staff to participate in training and field visits, both to develop their capacity and to encourage women participation. ▪ Promote the use of participatory processes (e.g. participatory needs assessment, community action planning and participatory implementation processes). ▪ Ensure the participation of youths, women and other vulnerable groups in community-based natural resource management, watershed management, small-scale irrigation, range management, Transportation and processing, and other income-generating activities.
4.6 **Attention to procedural measures** – that could militate against participation by the intended target groups;	SREP will have to: ▪ Simplify and streamline application procedures and record-keeping. ▪ Provide technical support by NGOs to assist groups, and FFS in project activities. Such as trainings and the preparation of business plans. ▪ Make beneficiary contribution requirements (e.g. the provision of labor or cash) realistic. (in the matching grant). ▪ Lay emphasis on endogenous technologies to ensure sustainability of project activities.
4.7 **Operational measures** – appropriate project management arrangements, staffing, selection of implementation partners and service providers.	A Project Single Coordination Unit (SCU) will be responsible for the day-to-day management of the project. The SCU comprise of at least the Programme Coordinator, Financial Management Officer, a Procurement Officer and a Monitoring and Evaluation (M&E) Officer. Technical assistance will be provided at the level of the SCU in selected technical subjects – FFS development, sustainable land management, rangelands development, small scale irrigation, small livestock husbandry, post-harvest management and marketing and curriculum development The SCU will consolidate progress, do the monitoring and evaluation reports and receive advice from the various committees such as Programme Coordination Committee(PCC).T Provincial Project Coordinating Committee (PPCC) Provincial Governance Committee (PGC**)**
5. Monitoring targeting performance. Does the design document specify that targeting performance will be monitored using participatory M&E, and also be assessed at mid-term review? Does the M&E framework allow for the collection/analysis of sex-disaggregated data and are there gender-sensitive indicators against which to monitor/evaluate outputs, outcomes and impacts?	The targeting performance will be monitored and report produced based on participatory M&E. The Monitoring and Evaluation Officer and his assistants will be directly involved in collecting data on Gender and reporting." This will be assessed at mid-term review and final evaluation of the project. All data will be disaggregated by sex and age as appropriate, with due qualitative analysis (women, youths, disabled, ex-combatants).

Attachment 2 - Gender checklist

Gender checklist	Design
1. The project design report contains – and project implementation is based on – gender-disaggregated poverty data and an analysis of gender differences in the activities or sectors concerned, as well as an analysis of each project activity from the gender perspective to address any unintentional barriers to women's participation.	Yes. Gender analysis was conducted, which includes poverty, livelihoods and analysis of specific social risks and barriers faced in rural communities. For analysis of each project activity from the gender perspective see main text of PDR.
2. The project design articulates – or the project implements – actions with aim to: • Expand women's economic empowerment through access to and control over productive and household assets;	The project will raise awareness among women and men and youths about ownership and inheritance rights through FFs and other associations. Also the project will promote joint land titling of Associations /FFS of which women are part. Market-oriented women and youths as well as other vulnerable groups will receive functional and financial literacy and leadership trainings and will be facilitated access to extension advice and credits and marketing, transportation and processing facilities
• Strengthen women's decision-making role in the household and community and their representation in membership and leadership of local institutions;	SREP will work with different associations such as water/land/forest/livestock/agriculture association to increase women's participation as members and leaders (at least >30% of total beneficiaries). Women will be trained in leadership skills, financial literacy, entrepreneurship, nutrition , Maternal health care etc.
• Achieve a reduced workload and an equitable workload balance between women and men.	SREP will help reduce women's unpaid workloads through labour-saving technologies, such as irrigation and mechanisation technologies, minimum tillage in conservation agriculture, efficient cook stoves, Cassava and maize milling machines, improving water management and availability for households.
3. The project design report includes one paragraph in the targeting section that explains what the project will deliver from a gender perspective.	YES. See paragraph 65; Direct targeting of youths, women, Ex-combatants and disabled will also be done through the established of quotas ensuring that both youths, women, Ex-combatants and disabled are represented among the project main activities:
4. The project design report describes the key elements for operationalizing the gender strategy, with respect to the relevant project components.	YES. See paragraphs on gender strategy and components.
5. The design document – and the project implements – operational measures to ensure gender-equitable participation in, and benefit from, project activities. These will generally include:	
5.1 Allocating adequate human and financial resources to implement the gender strategy.	Training on gender sensitive approaches has been incorporated into the curricula of FFS and other organisations. This has been budgeted in component 1 and 2. At SCU level, the Programme Coordinator and the monitoring and Evaluation Officerwill have the responsibility for ensuring that the gender strategy are incorporated in the project management tools such as AWPB, PIM, etc.
5.2 Ensuring and supporting women's active participation in project-related activities, decision-making bodies and committees, including setting specific targets for participation.	SREP will use quotas as seen below: 30% women in leading positions within FFS and associations; At least 40% of women trained through FFS on SLM and GAP;
5.3 Ensuring that project management arrangements (composition of the project management unit/programme coordination unit, project terms of reference for staff and implementing partners, etc.	SCU, PIT, PPIU will aim to have a balanced representation of men and women among its staffing. Within the SCU, the M&E Officer will be responsible for ensuring that the targeting and

Gender checklist	Design
reflect attention to gender equality and women's empowerment concerns.	gender strategy are taken into consideration in project implementation;(planning and monitoring of the gender mainstreaming in the project). This will be done under the general supervision of the programme coordinator of the SCU
5.4 Ensuring direct project outreach to women (for example through appropriate numbers and qualification of field staff), especially where women's mobility is limited.	At least 40% of FFS participants will be women. FFS trainings will facilitate women attendance by selecting location, timing and duration of the trainings suitable to them. Appropriate communication tools will be used such as posters and demonstrations
6. The project's logical framework, M&E, MIS, and learning systems specify in design – and project M&E unit collects, analyses and interprets sex- and age-disaggregated performance and impact data, including specific indicators on gender equality and women's empowerment.	Indicators of the logframe are disaggregated by gender and age. Gender and youth disaggregated performance and impact indicators will be monitored from the baseline studies, to quarterly reports, annual report, supervision and evaluation reports, final project report.

Appendix 3: Country performance and lessons learned

Country Performance

1. IFAD's first project in Angola, in 1991 was the Malanje Smallholder Sector Rehabilitation Project. A Country Strategic Opportunities Paper (COSOP) and new projects were formulated after the signing of the Lusaka Peace Accord in November 1994. At the time, there were two active loan-funded projects, the Northern Region Food Crops Development Project (PRODECA) and the Northern Fishing Communities Development Programme (PESNORTE). PESNORTE became effective in 1999. The new outbreak of war in late 1998, meant it was impossible to work in the field and operations all but ceased. At the end of the war in early 2002 the security situation improved and the project area became accessible again. PESNORTE objectives were re-evaluated and judged to still be valid, therefore the implementation period was subsequently extended to the end of 2007.

2. Following the preparation of the COSOP, a new project, the Market Oriented Smallholder Agriculture Project (MOSAP), was formulated by the World Bank for an amount of USD 49.5 million to be co-financed by IFAD with a loan of USD 8.5 million. MOSAP became effective in 2009, however implementation fell behind schedule early on, with field activities having started only around mid-2012, some 2.5 years after effectiveness. Delays were attributed to the difficulties in recruiting and retaining project staff, as well as extremely limited capacity in the Ministry of Agriculture to guide, manage and monitor the project. The project was restructured and FAO recruited to run a smallholder farmer education program ("Farmer Field Schools", FFS). Consequently project implementation accelerated and by the project closing date in March 2016, 91% of IFAD funds were disbursed and results in terms of smallholder farmer adoption of improved technologies were highly encouraging. During the implementation of the programme the MOA managed to establish criteria and procedures for supporting the development, selecting and monitoring of small investment projects with small family farmer's FOs and gain experience from their implementation. The Angola Fisheries and Aquaculture Project (AFAP) became effective in July 2016, more than a year after IFAD approval. The Smallholder Agriculture Development and Commercialisation Project in Cuanza Sul and Huila Provinces (SADCP-C&H-SAMAP) was approved by the IFAD Executive Board of April 2017 and implementation commenced in February 2018. The project contributes to increasing smallholder productivity by providing capacity building to subsistence farmers to improve their technical, organisational and managerial competencies whilst supporting a more conducive policy and enabling environment. SAMAP also invest with FOs presenting small investment projects following criteria and procedures and a selection mechanism established based on the lessons learned from MOSAP. Finally, the Agricultural Recovery Project (ARP), was formulated in 2017 with implementation expected to commence in the near future The ARP supports the restoration productive assets and droughts in the Southern Provinces.

3. The strategic emphasis of IFAD's programme in Angola, to date has been twofold: (i) supporting increased smallholder agriculture, fisheries and aquaculture productivity and production while building on lessons learned from earlier projects; and (ii) helping farmers and pastoralists in Southern Angola to recover from a five-year drought through a re-capitalisation of agricultural production. A commonality between all projects, in the IFAD portfolio, has been the Farmer Field School as the principal implementation and extension modality for recovery, resilience and longer term development. The SREP design builds on these two strategic thrusts.

4. SREP has also been informed by the preliminary findings of the recently completed Evaluation of the Country Strategy and Programme (2005-17) (CSPE) and has taken on board the principal lessons learned. Foremost is the need for intensive capacity development at all levels. CSPE noted that *"little has been done to address the dearth of human resources in Angola that emerges every time a staff member of a PCU or PIU has to be recruited, and to support the development of a pool of experienced professionals, in particular in the management of development initiatives and on fiduciary issues, and in some technical areas of key importance in agricultural and rural development."* The CSPE proposed that IFAD makes capacity development one of the pillars and cross-cutting principles for the programme portfolio. It goes on to recommend that IFAD contributes to fill the gap in the national human capital in the areas and sectors that are relevant to the implementation of its portfolio and that it should be done through "*the systematic allocation of resources and management provisions within the portfolio, that provide opportunities for capacity development at the individual and institutional level."*

5. IFAD, has also been engaged in non-project activities, supporting the Government of Angola (GoA) to strengthen its institutional capacity in agricultural research and extension to enhance smallholder access to agricultural innovations and technologies that address emerging issues of productivity, production, and commercialisation of priority crops. Consultations with GoA are being conducted to design the Results Based - Country Strategic Opportunities Programme (RB-COSOP) for the period 2019 – 2022. The COSOP process is participatory with multi-stakeholder consultations to identify and work towards addressing policy related constraints to the provision of effective support to increase smallholder agriculture, fisheries and aquaculture. Consultations with the Government and other relevant stakeholders commenced in April 2018 with an objective of taking stock of lessons learnt in the implementation of the country's rural agriculture support programme, whilst identifying challenges and creating a vision for the RB-COSOP. During the preliminary consultations, GoA highlighted key contextual considerations: i) the increasing importance of agriculture as a critical part of GoA's economic diversification strategy; ii) the emerging focus on inter-sectorial coordination and collaboration in delivering rural agricultural development programmes; iii) GoA's preference for IFAD to consider an integrated programmatic approach in future interventions in the country; and iv) the continued need to build capacities at Government (national, provincial and municipal), community and household levels for effective implementation of agriculture development programmes and sustainability of impact.

6. The RB-COSOP is expected to focus on contributing to the sustainable and inclusive transformation of family farming, to raise incomes and improve food security, and in this way contribute to economic diversification. The goal is expected to be achieved through three focus areas i.e. (i) sustainably increase production and commercialisation through access to productive and post-harvest assets, knowledge and technology, (ii) promote agricultural value chains and agribusiness through investments that stimulate rural economic activity and employment for the rural poor, and (iii) strengthen institutional, community and human capacities to ensure effective implementation and sustainability of rural development programmes, and empower the rural poor to meaningfully participate in the transformation of the rural sector. The feedback from the COSOP formulation process as well as other factors have been taken into account in the SREP design.

Lessons Learned

7. Further lessons generated from IFAD's experience in project implementation have also guided SREP design. These include:

Design and implementation of sub (micro) projects

8. *Investing with farmers through demand-driven small investment proposals (subprojects) promotes sustainability***.** The modalities for preparing and implementing demand-driven subprojects under MOSAP has generally been regarded as successful (see project external evaluation) and investment criteria, procedures and selection mechanism have evolved over time from MOSAP to SAMAP and MOSAP II based on lessons learned. The key elements of success were (a) creation of ownership through community participation in all stages of subproject preparation and implementation, as well as direct community contributions (cash or in kind); (b) farmers' organisations' commitment to engage in O&M before disbursement of project contribution; and (c) training of farmers' organisations and assistance with establishment of user rules and cost-sharing agreements. These elements together with the proven investment criteria, procedures and selection mechanism already managed by IDA have been incorporated in the SREP design.

9. *Flexibility is required in the design of micro-projects and the criteria set for eligibility for the different categories of beneficiary groups.* The experience of MOSAP I and II, more recently SAMAP show that sub-projects are offered at three different levels: a) area level for infrastructure investments b) community and group level, for productive group investments and c) individual household level for a diversified range of beneficiaries (women, youth, ex-combatants, the disabled and the ultra-poor. Flexibility is needed in micro project design to ensure inclusiveness and the ability to reach the more vulnerable households. Besides matching grants and revolving fund mechanisms direct cash and kind transfers should also be applied.

Monitoring and Evaluation is an important management tool for project adaptation to changing contexts: Lessons learned from the MOSAP project implemented to date and the IFAD portfolio currently under implementation recognise the importance that needs to be given to M&E. As with the limited institutional capacity within Angola as a whole, there is a dearth of skilled M&E experts in the

country. Considerable time is taken to recruit and keep M&E experts. The collection, compilation and analysis of field data for monitoring purposes is a major challenge requiring the development of appropriate software for use at field level. Given these lessons it is vitally important that adequate technical staffing at all levels is included in project design. Resources also need to be made available for external Technical Assistance support in M&E design. Service providers and communities need to be mobilised and trained to support the M&E system in the target areas.

Capacity building and incentives

10. *Strengthening the capacity of local service providers will be necessary to help farmer organisations and other target beneficiaries to effectively develop and implement micro project proposals.* While the use of local service providers to assist FOs in the preparation and implementation of sub-projects is preferable for long term sustainability, their capacity is being stretched, particularly as donor support for the country is expanding. Project design has to recognise this limitation and ways sought to train and capacitate local NGOs on a regular basis. A cadre of specialised international TA will be necessary to provide effective support to IDA staff, local NGOs and the private sector throughout project implementation.

11. *Involvement of local authorities at the provincial and municipal levels in planning and monitoring project activities:* Engaging local authorities in implementation has been seen to be vital in ensuring ownership of the project at local level, facilitating local coordination and contributing to the decentralised planning process. Over time, it will also help to convince local authorities to make available budgetary resources for smallholder farmer support and development.

12. *Ensuring simplicity of design and ease of implementation*: Considering the recurrent difficulties in project implementation in Angola due to the limited human capital, there is a need for simplification in project design and implementation. Projects with simple, flexible designs place fewer demands on the scarce managerial and financial resources available in the rural sector. Effort will need to be made to reduce the complexity of project design and focus on key and prioritised interventions. Partnerships should be pursued with other development stakeholders to achieve and upscale results. These factors also point to the need for more intensive and closer guidance for projects to operate efficiently and effectively in Angola.

13. *Effective operations and maintenance of infrastructure*: The need to ensure that capacity exists to sustainably operate and maintain infrastructure works. Development of a strategy for the operation and maintenance of infrastructure should involve all stakeholders and be developed before construction is undertaken. This could be addressed through capacity building, awareness raising and the development and implementation of community-based development and management plans. A community development approach to the management of infrastructure can provide good results, lead to strengthening of participating groups and, if more intensively used, can provide reductions in the cost of investments.

14. *Building government capacity for more rapid project implementation and stronger country ownership.* The pace of project implementation in the country has been seen to be slow, especially during the start-up. To accelerate implementation and ensure sustainability of project results, a concerted effort will be required to build the capacity of government staff over the short and longer term. Over the short terms efforts will be needed to develop capacity in fiduciary matters to manage and implement projects more effectively. Simultaneously technical capacities in agriculture, sustainable land management and participatory processes will similarly need to be enhanced. Over the longer term capacity building efforts are needed to strengthen IDA's field presence in these technical areas.

15. *Incorporating an incentive system for key government staff involved in project implementation:* This has proved to be an effective element in promoting project performance and helping to achieve project targets. Government staff working under the project will require a satisfactory work environment (training, equipment and living conditions) to incentivise provincial and front line extension staff involved in project implementation.

Inclusivity

16. *Provisions for women's empowerment*: All project design reports have made adequate provisions for the inclusion of women as beneficiaries, including some references to empowerment. In

practice, however, efforts towards women's empowerment have been limited with a minimal share of women in leadership roles in Farmer Field Schools, associations and cooperatives and in a technical capacity as members of PPIUs. Greater effort is needed to ensure that women play an equal role in farmers' organisations and influence project investment decisions.

17. *Targeted interventions for youth:* Although youth have been identified as a target beneficiary in some of the projects there has been little impact made. Youth participation in projects has been limited. Designing interventions that target youth is recognised, nationally, as important in terms of generating employment and ensuring broader national security by offering to young people, opportunities for decent work and sustainable livelihoods, particularly in rural areas. Both women's empowerment and inclusion of youth, are among the fundamental pillars of the national goals of Angola to ensure an equitable and peaceful society. Both need to be adequately addressed and pursued in future interventions.

Building resilience and sustainability

18. *Community development through Farm Field Schools as a key mode of project implementation and scaling:* The FFS approach to agricultural extension has been seen to be effective in enhancing smallholder farmers' capacity to generate and use new knowledge and adopt improved agricultural practices and technology. It is also regarded as a methodology that empowers smallholders. The FFS has been incorporated in all IFAD projects and those of other agencies (AfDB, EU, World Bank) and is being implemented at scale. The FFS is also recognised as a mechanism to ensure institutional sustainability beyond the project life by evolving over time into farmer associations or cooperatives, linking members and their organisations to markets and empowering smallholders to improve their livelihoods in a sustainable manner. The FFS has been accepted by government as its national extension strategy and will be used in future project design.

19. *Importance of linking smallholder farmers with markets*. Long-term success requires not only improved on-farm productivity but also opportunities for farmers to have access to, and compete in, output markets. In SREP Norte, in particular, the sub-project needs to provide support for marketing activities at several levels, including assistance to FOs and entrepreneurs in bulking of agricultural produce or purchase of inputs, and in small and medium scale processing. Such interventions can stimulate investment diversification and the strengthening of rural enterprises.

20. *Building resilience of smallholders*: The adverse impacts of climate change are already affecting rural livelihoods in Angola, particularly agriculture production in the southern regions. The recent El-nino events and the resulting crop losses and livestock deaths drew attention to the need for enhancing resilience to improve the community livelihoods and encourage the sustainable use and management of ecosystems.

21. *Environmental Management*: The FFS is an effective channel to improve the environmental management in farming activities. This requires capacity building of the trainers and the EDA staff. Stronger collaboration is also required between the MINAMB and the MINAGRI teams to equip various technicians with the right skills and tools to provide advisory services and support to smallholders.

22. *Land degradation*: Particular attention is required in some locations where soil erosion is becoming increasingly a cause of concern such as cultivation on hill slopes and the expansion of agricultural land. Soil and water conservation measures can be promoted to address the issues of land degradation.

C. Other Considerations

23. Two new elements have recently emerged to inform the design of SREP. The first is the interest of the Government elected in August 2017 to revamp the family farming sector; and secondly, an acknowledgment by the Ministry of Agriculture of the key role that the family farming sector can have in sustainably addressing the current economic and financial crisis and meeting the national food requirements. Both elements provide the rationale to support a pro-poor agricultural and rural development agenda that lies at the core of SREP.

24. Some key additional issues were addressed resulting from discussions held with the government and SREP Co-financiers (AFD, BADEA,) during the design. These include: (i) the need to invest in the construction and rehabilitation of infrastructure such as: feeder roads, bridges, market

structures and small scale irrigation systems (ii) the need to develop the institutional capacity of project management and the technical capacity of government staff and service providers (iii) the need to target interventions at youth, women, former combatants, people with disability and the most vulnerable individuals and households; (iv) support the pilot programme for young unemployed agricultural graduates in agro-enterprise development; (v) the need to provide mechanization services for expanding land under cultivation (vi) the need to move away from giving inputs to cooperatives and farmer associations through government subsidies and instead building greater self-reliance through using revolving funds; (vi) the need to provide assistance to cooperatives in obtaining legal status and secure access to land.

Appendix 4: Detailed Project Description

1. **Overview:** The **goal** of SREP is to contribute to improved food security and nutrition for targeted households. The development objective is to increase agricultural productivity and resilience of farm households. Component 1 will concentrate on strengthening Institutional capacity to support climate resilient smallholder production. Focus will be placed on strengthening the agricultural extension service support and providing nutrition and environmental services whilst, concurrently, investing in public sector infrastructure – land and water resources, feeder roads and markets. Component 2 will focus on direct support to building the capacity of family farms through the organization and training of farmer groups and household level mentoring combined with community and household level investments to enhance agricultural productivity and diversify livelihoods. The Farmer Field School methodology will be deployed to train farmers to adopt improved agricultural technologies that will sustainably increase food crop yields, improve soil health, and make way for increased crop diversification and commercialisation. The Project will also facilitate farmers in obtaining access to the inputs needed to increase crop productivity, and diversify livelihoods. The two components together will improve the food security and resilience of smallholder family farmers to better cope with the vagaries of climate change.

2. **Project Area:** Tentatively 35 municipalities have been prioritized in the targeted provinces, with final selection to be made during implementation[46]. SREP covers two discrete agro-ecological areas: the northern provinces of Bengo, Zaire, Uige and Cuanza Norte and three southern provinces, Benguela, Namibe, and Cunene which are more susceptible to the vagaries if climate change. SREP will replicate the approach followed by SAMAP in the northern provinces to increase productivity and market linkages in support of family farmers and their organisations (FOs – producer groups, cooperatives or associations). Project activities in the three southern provinces will build on the recovery efforts of ARP and aim at enhancing the resilience of family farmers and their communities to climate change.

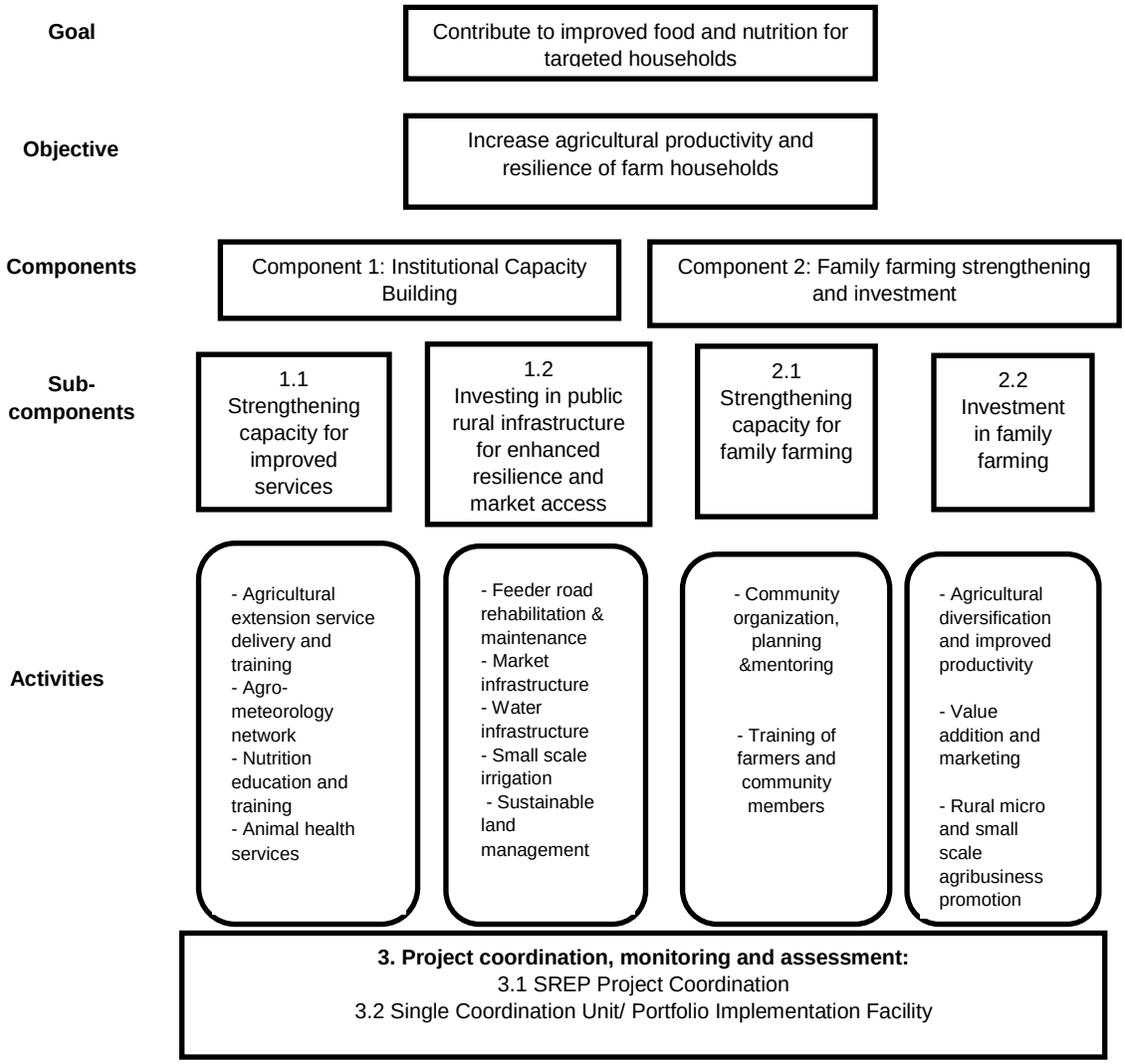
3. **Target Group:** The total coverage of SREP will be 218,000 households of which some 120,000 farm households are members of around 2,000 producer groups (cooperatives and associations).

4. **Project sequencing.** The Project will be implemented over six years using a gradual approach to establish operational modalities, train staff, set up and implement farmer field schools, engage with communities and screen/evaluate micro and sub-projects and develop partnerships and coordination arrangements. A mid-term review will be undertaken in year 4.

5. **Management and coordination**: The SREP project will be managed by a Project Management Unit under IDA supported by a Coordination Unit providing fiduciary and technical support.

6. SREP comprises two technical components and a cross-cutting management coordination component, divided into sub-components as laid out below.

[46] The provinces include Bengo, Uige, Zaire and Cuanza Norte, in the north and Cunene, Namibe, and Benguela in the south.



Component 1: Institutional Capacity Building (US$ 85.2 million):

7. Component 1 will focus on strengthening the institutional capacity to support climate resilient smallholder production by enhancing the adaptive capacity of provincial, municipal and field level extension and support service staff. The component will support a range of activities designed to ensure adequate coverage of agricultural extension service (EDA) staff in target municipalities. Concurrently, investments will be made in public sector infrastructure including feeder roads, markets, water resources and land management.

Sub-component 1.1: Strengthening capacity for improved services to family farmers:(*US$22.9 mill.)*

8. **Objective:** To strengthen the capacity and skills of government agricultural extension specialists at provincial and municipal level, and national NGOs supporting the development of family farming and producer groups.The outcome of Sub-Component 1.1 is to strengthen institutional capacity to deliver services to enhance food security, productivity and resilience.

9. Sub-Component 1.1 will include five major interrelated activities intended to improve the agriculture extension service delivery and strengthen the human resource capacity of advisory and

service providers in climate change, environmental management, nutrition and livestock health services. The activities are listed below:

a) **Agricultural Extension Service Delivery and Capacity Building:** A target ratio of three front line extension technicians per commune has been set, but there is a dearth of EDA extension positions with many positions unfilled. There will be a need for an additional 149 staff to fill these positions under a graduated formula for cost sharing of their salaries over the life of the project:

Project Year	Project Percentage	Government Percentage
1-2	100	-
3	60	40
4	50	50
5+	-	100

This activity will also support the rehabilitation/construction of extension facilities at local level including offices and residential complexes for staff. Some 12 offices will be rehabilitated, 16 new offices constructed, and a further 32 residential houses constructed and/or rehabilitated. The project will also fund the improvement of those offices and units that are essential for implementation, including, for instance, office and training equipment, and transport and communication facilities. It will be important to establish effective communication systems (telephone, internet and e-mail facilities) in EDAs and the provincial project offices, linking these to each other and to the PPIUs and PIU in Luanda.

Training EDA staff as potential trainers and advisors is critical to improve the extension worker to farmer ratio. Other Government staff at provincial and municipality level and other service providers will also be trained. Focus will be placed on participatory extension, community development and gender, climate change adaptation, environmental management as well as miscellaneous technical subjects. Training topics may include some or all of the following: i) community organisation, FFS establishment, facilitation and curriculum development; ii) community driven natural resource planning and management; iii) water harvesting infrastructure and techniques, complementary irrigation and establishment of water users associations (WUAs); iv) climate information data collection and analysis; v) vulnerability analysis and mapping; vi) identification of adaptation measures for the different agro-ecological zones; and vii) basic environmental management, monitoring and impact assessment. One of the results will be that extension workers will organise farmers into local groups, cooperatives, associations and FFS groups. This implies training around 354 extension officers in the FFS methodology and curricula (3 per commune). Some 1,330 provincial and municipal staff will also be trained in the target Municipalities over a four-year period.

b) **Strengthening of the Agro-Meteorological Network**: SREP will support strengthening the agro-meteorological network to enhance resilience through climate data collection and weather forecasting. Data will be collected and applied for the development of downscaled climate models and productivity and hydraulic balance models aimed to optimize water use in irrigation, soil conservation and the prevention of soil erosion. SREP will also support the timely dissemination of climate and weather information to farmers to enable them to incorporate the information in their decision making. Participatory approaches will be adopted for the use of climate services taking into account historic climate data and trends to build capacity of the smallholders and improve farm level planning. The activity links up with the training programme to support family farming communities under sub-component 2.1. It further relates to weather forecasting and the preparation of early warning climate bulletins

tailored to the needs of farmers and backed up by extension advice. Farmers' need to be trained in different action options based on different forecasting and warning messages[47].

c) The data collection and analysis will require purchasing equipment and materials, which will be managed by INAMET in collaboration with the Cabinet of Food Security and IDA including communication strategies ensuring timely information for farmers and other stakeholders. The equipment will include agro meteorological stations, analytical units and dissemination units.[48] SREP will support the update of the agro-ecological maps at the regional level and also vulnerability mapping for prioritized areas and crops. The maps produced will be used to inform IDA strategies and decision making at the local planning level for natural resources and environmental management[49]. Technical assistance is given for an environmental management expert.

d) **Nutrition education and training**: Nutrition education will focus on promoting healthy eating through income growth interventions, own production and awareness raising on food diversification through kitchen gardens for ready available vegetables, fruits and animal based products (see sub-components 2.1 and 2.2). Nutrition education will also include the element on nutrition relevance to climate resilient productivity and alternative livelihoods for resilience. A starting point for nutrition education and mainstreaming will be training front line extension workers through the FFS methodology, described in 2.1, together with an awareness raising programme that will include the use of mass media and IEC materials in communities. SREP will support coordination of the school meal programme with other line Ministries through technical assistance. This activity will target at least 2 public primary schools per target municipality in the 7 provinces. Each target school will be linked to the extension services to promote nutrition education and hygiene practices. Identification of beneficiary schools will focus on the public schools within the project target areas and consideration of the overall nutritional status of children. SREP will also undertake a comprehensive food survey - Knowledge, Attitude and Practice (KAP). The survey will collect baseline data to guide the implementation of nutrition activities and contribute to a national information system, collecting data to monitor the food and nutrition security situation in the target areas. The activity will be conducted by extension service staff and other service providers in collaboration with the Ministry of Social Action, Family and Promotion of Women (MASFAMU) and the Ministry of Health. The nutrition activities will build on the lessons learned on similar training activities in ARP and SAMAP as well as align with the national programmes of MASFAMU. Identified gaps and constraints highlighted in the on-going projects will be addressed by SREP.

e) **Strengthening of Animal Health Services:** Technical training will be given to field staff of the Veterinary Service Institute (ISV) at provincial and municipality level and efforts will be made to build on the work of ARP, in the southern provinces, to develop a cadre of Community Animal Health Workers (CAHWs). CAHWS will be identified through the FFS methodology and amongst the cadre of Community Development Facilitators (CDFs). SREP will target around 50% of women to take on this role to ensure greater access to livestock services by women livestock owners who tend to manage poultry and goats. Some 100 CAHWs will be

[47] Management decisions include the type of crops and varieties to grow, the timing of planting under dry year conditions, how to build up pasture in closed areas in wet years as a buffer for dry years and when to apply fertilizer depending on rainfall to get optimal benefits for plants, etc.

[48] Currently IDA has a team (market price, production and studies groupings) that analyses data collected statistically in a basic manner for the linear correlations between rainfall and productivity. The analyses are integrated into reports but the data is limited and not validated in the field. Potential parameters to include would be radiation and evaporation to also measure the hydraulic balance and establish the production correlations. Based on the hydraulic balance models, irrigation needs for each specific crop will also be identified taking into account the climatic and agro ecological conditions and therefore contributing to a sustainable management of water resources, informed calendars for farming activities and support on the selection of inputs. Periodic hydraulic balance reports produced taking into account soil parameters will be fully available through a dedicated web portal.

[49] Other key stakeholders such as the Agricultural Research Institutes will be engaged in updating the maps. Which will include hotspots with regards to land degradation, which can be prioritized for soil and water conservation measures as well as environmental management.

selected and trained in animal health for cattle and small livestock. The training will include priority diseases, treatment regimes, and vaccination protocols. Qualified veterinary oversight will be made available to support the CAHWs through the veterinary institute and local private veterinarians. Refresher training will also be provided. The project will assist with course design to ensure that priority and high-risk diseases are covered, including treatment and vaccination protocols. Solar freezers will be provided – one for each municipality. Each CAHW will be granted a vaccination kit and a bicycle.

Sub-component 1.2: Investing in public rural infrastructure for resilience and market access: *(US$ 62.3 mill.)*

10. **Objective:** The objective of this subcomponent is to invest in construction of rural infrastructure and land development to enhance climate resilience and promote better production and marketing conditions. Different types of investments will be supported including: a) the construction and rehabilitation of feeder roads, b) construction of market facilities, c) water resources development including small scale irrigation, and d) sustainable land management. The investments will be identified taking into account the needs identified in the NRM and small business planning process in subcomponent 2.1 and the creation of synergies and maximizing benefits of investments made under subcomponent 2.2. The expected outcome will be rural infrastructure strengthened to build resilience and enhance productivity and market.

11. The principal activities to be undertaken will include:

a) **Feeder Road Rehabilitation and Maintenance:**Investments will be made to improve the condition of selected feeder roads in both the northern and southern provinces and critical secondary roads through construction of drainage infrastructure (culverts). The criteria for prioritising road investments will include:

- Potential to stimulate increased agricultural production;
- Linkages to bulking/aggregation centres;
- Linkages to main roads and markets;
- Number of potential beneficiaries;
- Provision for maintenance and inclusion in provincial/municipality development plans;
- Synergies with other road development activities

Road rehabilitationwill include some 500 km of feeder roads. Rehabilitated roads will be maintained by the project including both routine and periodic activities. The development process of these assets will include the following steps: (a) studies, design and supervision; (b) procurement; (c) construction; (d) liability and handover; and (e) management of assets.

The project will form and support road gangs on each rehabilitated road and develop Provincial road maintenance plans. Following an inventory of the network of rural roads in target areas, a rural road improvement programme will be developed. The Project will rehabilitate on average 20 km per target municipality and will construct culverts in selected places. Community-based road maintenance plans will be developed at provincial levels and road maintenance associations strengthened/ formed at community level. Training of trainers (TOT) in road maintenance will be provided to the staff of the municipalities who will then train and mobilize leaders of the associations. In addition, low-cost hand tools and equipment will be provided to the communities to undertake maintenance.

b) **Market Infrastructure and Platforms**: Market infrastructure will be provided mainly in the form of aggregation and storages facilities (warehouses) for agricultural commodities at commune and municipality level – as a pilot activity. Eligible investments will include:

collection points, storage and package facilities and field shops.[50]The platforms will serve as a venue for farmers, service providers and the private sector to meet, learn and negotiate arrangements. Direct linkages will be strengthened between the cooperatives/associations and private sector value chain stakeholders identified through value chain studies. The municipality level platform will mirror the commune level in establishing aggregation points or bulk markets but will have additional functions: a) to facilitate policy dialogue with local government and other public sector bodies, b) facilitate communication between various market stakeholders; c) identify opportunities to improve market access and linkages; d) implement business plans for investment to improve market access particularly through investment in aggregation points / markets and / or sub-regional bulk markets; and e) participate in preliminary design of the markets and selection of market locations. The municipal platforms will be composed of representatives of the Farmer Field schools, cooperatives, associations, local government employees and the private sector.[5152]Platform/ cluster hub meetings will be held regularly (at least twice per year) initially facilitated by the project team but later jointly by the producers and private sector stakeholders. Commercial and non-commercial suppliers (of technical or financial services or inputs) as well as government agencies and other supporters would also be active participants. Implementation arrangements at municipality level will be through collaboration with relevant Government Ministries and Agencies, Provincial and Municipal level entities, local communities and private consultants and contractors.[53] A Civil Engineer will be recruited to oversee the public works.

c) **Water Infrastructure:** Small scale water harvesting structures will be developed to increase water quality and availability for multi-purpose usage. The infrastructure will be linked to the creation of community water users groups (subcomponent 2.1) for the operation and maintenance of the infrastructure and implementation of catchment management and conservation. This will be important for the sustainability and effectiveness of the infrastructure including reduced siltation and as such maintenance costs and increased lifetime. The activity will be targeted at drought prone communities in the three southern provinces of Cunene, Namibe, and Benguela. The most common structure found in the area are "*Chimpaca*" – large artificial reservoirs - and sub-surface dams, which will guide this process. Strict selection criteria will be applied and will include:

- Existence of a secure gravity-fed water source;
- The level of organisation of users and willingness to contribute to operation and maintenance costs and catchment conservation through WUAs;
- Technical feasibility;

[50] The concept of Field Shops – agro-dealer facilities – is being piloted by MINCO. Three levels of field shop investments have been set – municipality, commune and deep bush level – with three different ceilings of investments. $200,000 at municipality level, $100,000 and commune level; and $50,000 deep bush level. Investments in Field Shops should be regarded as a pilot programme.

[51] The municipality level market stakeholder platforms will be modelled on the UNDP supported platforms set up in in Huela Province as a pilot.

[52]Cluster hubs and multi-stakeholder platforms should be conceived as pilot programmes.

[53]Although feeder road construction and maintenance is the responsibility of the municipalities, it is a newly decentralised activity and capacity for implementation is low. The detailed planning and implementation of these activities will be through strong participation of the farmer organizations and other actors in the value chain. With respect to maintenance of feeder roads, it is the responsibility of communities at local level to lead this process. Local ownership and O&M responsibility should begin at the community level. Construction of road infrastructures will be undertaken by private contractors through competitive bidding. The Marketing Infrastructure Officer (MIO) in collaboration with municipality staff will be responsible for supervising all civil works. As improved road infrastructure will directly benefit the communities in the Programme area, the programme will provide technical and physical assistance to community road maintenance associations (existing or to be formed) in the area. The Programme will sign tripartite MoUs with the leaders of these associations and the target local municipalities with the latter assuming responsibility for routine maintenance of feeder roads in collaboration with the community. SREP will also collaborate with the Ministry of Commerce and Trade (MINCO) and/or municipality Local Government Councils (LGCs) to facilitate the construction of the market infrastructures in the target municipalities.

- Proximity and availability of materials for construction;
- Number of potential users;
- Cost/benefit ratio.

d) **Small-scale Irrigation:**There is potential for irrigation in the more arid southern provinces along the riverbanks and valley bottoms. Small scale irrigation will be extended through low-cost technologies that are easy to operate and maintain. Only gravity systems of less than 35 ha will be supported up to a total of around 700 ha. Schemes will be constructed at an average cost of around $10,000. WUAs will be set up and supported to ensure sustainability in the operation and management and negotiate and implement governance scheme to ensure equitable access to water and to avoid possible conflicts. Schemes will be funded based on investment proposals incorporating prefeasibility studies, feasibility studies, detailed design, and environment management plans. No infrastructure investments will be made before the local authorities confirm the beneficiaries' land and water user rights. The site- or scheme-specific environmental and social management plans (ESMPs) (to be prepared after the site/design details are known) should consider the interests of downstream water users as well as environmental flow requirements. Criteria for selecting schemes will include:

   - Value chain analysis (existing markets to absorb production of the targeted commodities);
   - Hydrology (existence of sufficient, good quality gravity-fed water);
   - Agronomy (potential for high production/productivity, existing agronomic practices and farming system, etc.);
   - Topography (use of irrigation by gravity, potential area covered due to optimum alignment of canals, use of cost-effective technology, etc.);
   - Land tenure system (existing of a certificate of property); Socio cultural environment (existing irrigation practices, good level of adoption of irrigation, potential for farmers' mobilisation, etc.);
   - Accessibility to the scheme, connection to markets), etc.

e) **Sustainable Land Management:** Interventions to redress land degradation from overgrazing will include: (a) rehabilitating rangelands and pastures and (b) undertaking soil and water conservation measures. Rangeland development will focus on ecosystem-based rehabilitation around the water points where agro-pastoral systems are predominant in Cunene and Namibe provinces. Activities will include community led improvement of fodder and natural grasses and shrubs and the establishment of grazing exclusion areas. This will be supported by range and herd management practices and improvements in livestock health. Attention will be given to low-cost soil and water conservation measures and famer-assisted natural regeneration of grass, shrubs and trees on communal and cultivated land.

   Funding and implementation arrangements: Grant funding will be provided for productive infrastructure works that have a high public value and/ or use content. These sub-projects include rehabilitation of roads, construction of small bridges, the establishment or rehabilitation and improvement of small-scale irrigation and drainage works, (small-scale earth dams to harvest and store water, shallow wells and boreholes for (drinking) water, dip-tanks for livestock parasite control, rangelands management, reforestation and erosion control, rural market facilities, simple livestock slaughter facilities and small-scale storage structures.

   Implementation arrangements: International and national consultants will be recruited to provide technical assistance in Water Resources Development (water harvesting and small scale irrigation), Sustainable Land Management and Pasture/ Rangelands Development. International consultants will be paired with national counterparts, to build local capacities.

Component 2: Family Farming Strengthening and Investment(US$ 37.9 million)

12. Component 2 will support activities which are aimed to strengthen smallholder family farming through capacity building and agricultural based investments. Investments in agricultural production, productivity, livelihoods diversification and linkages to markets will be enforced by technical, business and marketing support of front-line service providers for increased crop and livestock productivity, diversity, access to markets and value addition. SREP will strengthen existing farmer associations and agro pastoral groups through designing a training/ extension programme around the adaptation of the Farmer Field School/Livestock and Pasture Field Schools methodologies to the two project areas – the northern provinces with potential for stronger commercial linkages and the southern provinces where the emphasis will be placed on climate change adaptation for agro-pastoralists. Food crops including cassava, sorghum, millet, maize, beans and fruit and vegetables will be selected as priority crops mainly in the north while cattle, goats and sheep will also be the focus of agro-pastoral farmers in the south.

Sub-component 2.1: Strengthening capacity for family farming:*(US$21.7 mill.)*

13. **Objective:** To strengthen the capacity and skills of family farmers and their communities through government agricultural extension specialists and national NGOs supporting the development of family farming. The FFS methodology will be used as the main instrument for reaching target households within the community and create groups learning together through experimenting and adoption of new practices.. The skills and capacities required at field level will be strengthened to ensure that communities become more resilient to climate-related shocks and that the necessary support services to communities and households will be readily available. This subcomponent will provide the essential capacity building to ensure effective implementation of subcomponent 2.2.

14. The **outcome** of Sub-Component 2.1 will be the acquisition of skills and technologies among family farmers for food and nutrition security, enhanced resilience/ productivity and market access.

The principal activities to be undertaken will include:

- Farmer organization, planning and mentoring
- Training of farmers and community members

a) **Community organization, planning and mentoring:** Community organization is the principal means by which SREP will assist farmers to prepare and implement natural resource management plans, business development plans mainly for producer groups in the north mobilise the community and organise farmers into self-help and user groups and through the latter connect farmers to markets in order to overcome high transaction costs and make the transition from a production to a market orientation. By working in groups farmers can access extension and inputs more easily, improve production quality, increase quantity, achieve economies of scale in marketing, and increase bargaining power with buyers. Working through groups can also reduce the costs associated with supplying inputs, aggregating products, providing extension services, and negotiating contracts. Whilst groups have many useful functions, care will be taken to ensure that individual financial incentives are maintained and that communal interests are aligned with personal interests. The project will follow a social mobilization process that will develop self-reliance among community members through a process tested through ARP. A savings-first approach will be followed together with the establishment of revolving cash and in-kind grant schemes. Guidelines on the use of grants and loans will be included in the PIM. A cadre of Community Development Facilitators will be selected from within the target communities to lead the social mobilisation and group formation/strengthening and mentoring processes. The community facilitators will be used to mentor the most vulnerable households (women headed households, youth and the disabled). Support for social mobilization will come from local NGOs selected and contracted for this purpose. As capacity amongst some of the local NGOs in social development is low, SREP will provide technical assistance to strengthen their skills. The project has budgeted two full time positions for nationally recruited Community Development Facilitators to be supported by an International Social Development expert. In-kind incentives have also been

allocated to motivate champions in social mentoring in all SREP project areas. Some 150 community based Natural Resource Management Plans (NRMP) will be prepared as part of the community development process, particularly in the southern provinces. Although not accommodated in the legal land management systems, NRMPs are expected to be acknowledged by all relevant private and public actors as these will participate in the elaboration of the plans. The expected output will be at least 150 community NRMPs as framework for sustainable management of natural resources.The NRMPs will allow communities to map their available resources and outline agreed approaches to sustainable management[54].

b) **Training of farmers and community members:** The FFS approach has been promoted by previous IFAD and World Bank supported projects in Angola (MOSAP I and II, SAMAP etc.) with substantial technical assistance from FAO and is regarded as the principal approach in IDA/EDA's extension strategy. Some of the larger NGOs have experience with FFS, supporting projects in the middle and southern region of Angola and have the capacity to replicate and scale out the approach in the north. In each cluster of two provinces IDA will be supported by a single service provider experienced in FFS. A typical size of a FFS is between 20 and 30 members. Approximately 5,000 schools will be established with 3,500 in the northern provinces and 1,500 in the southern provinces. Nutrition mainstreaming will be essential to address the high incidence of stunting.[55]FFS roll-out will take place in a sequenced manner beginning in about half of the municipalities initially and subsequently expanding to cover all municipalities in the seven provinces. This activity together with community development will be implemented through service provider contracts with experienced national NGOs. SREP will also provide technical assistance support through the recruitment of two national FFS officers supported by an international FFS specialist.

FFS training

The FFS methodology involves the training of master trainers, elaboration of a training curriculum, community mobilization for the establishment of FFSs groups (25-35 members in each). A typical FFS is expected to follow a cycle of 30 months over three-years: 12 months in year 1, 6 months in year 2 and a further 12 months in year 3.[56] The learning will be conducted within the village and on a common plot of land.[57] The training curriculum will be designed together with the FFS members to reflect the social and agro-ecological challenges that they face. Farmer and Agro-Pastoral Field Schools (FFSs/PFSs) will offer applied training to farmers on the adoption of GAPs, including use of quality seed/planting materials of improved varieties, integrated soil fertility management (especially for cassava), integrated pest management and water-nutrient use efficiency. Climate change adaptation options will also be offered including soil and water management, conservation agriculture and planning of the cropping calendar, diversifying, intercropping, and sequencing planting times to spread

[54]A first stage of preparation of the NRM plan is an agro-ecosystem analysis where farmers are expected to better understand their ecosystem, and the consequences of poor management practices and opportunities that could arise from better management of the system. The approach will be to develop a vision of the future to ensure community ownership. Agreement will have to be reached by the various community members, which will require the active engagement of community leaders as part of a participatory process. The outputs of the planning process will be: a) a community map highlighting the agriculture and NRM features that will influence the types of production and NRM management activities implemented by SREP; and b) a prioritised list of both group based and individual

[55] "The incidence of stunting ranges between 25% and 45% in the targeted municipalities.

[56] The first cycle will include facilitated sessions in basic crops and participatory diagnostics of constraints and needs for increasing productivity. The second cycle will focus on production enhancement and crop diversification, and the third cycle will consolidate the achievements of the first two. The evolutionary process will create opportunities for establishing viable and sustainable commercial farmer based organizations (producer groups, cooperatives and/or associations)

[57] The number of FFSs to be set up is based on the implementation experience of MOSAP I and II as well as the SAMAP design. As the full cycle of 30 months is capacity intensive it is likely that some schools established later in the implementation process will be of shorter duration and frequency of meetings. This has been factored in to the economic and financial analysis of SREP.

risks. Functional numeracy and literacy and business management training will also be offered depending on community needs.

Sub-component 2.2: Investment in family farming:*(US$16.3 mill.)*

15. **Objective:** To improve agricultural productivity, increase value addition, link farmers to markets and increase incomes and livelihood opportunities for family farmers. Agricultural productivity will be enhanced under rain-fed crop and irrigated systems and livelihoods diversified in alignment with the NRM plans developed under subcomponent 2.1 and accompanied by the capacity building efforts to ensure sustainability of activities (Subcomponents 1.1 and 2.1). Poor dietary diversity will be addressed by increasing the availability and consumption of nutritious and diverse-foods and enhancing income to ensure healthy eating and improved family diets.

16. The **outcome** of Sub-Component 2.2 will be improved profitability of farm and non-farm income generating activities to improve access to food. To prioritize investments, farmers and producer groups will be supported in developing small investment proposals (subprojects or micro projects) including a simple business plan aligned with the NRM plans (subcomponent 2.1). Activities to be financed include:

- Agricultural diversification and improved productivity
- Value addition and marketing
- Matching grants: rural micro and small-scale-Agri-business promotion

a) **Agricultural Diversification and Improved Productivity:** SREP will address food insecurity and nutrition by enhancing the production and sales of staple food surpluses including maize and millet, whilst diversifying the rain fed system and household diets by including cassava, sweet potato and beans. Crop diversification will mainstream nutrition through the introduction of improved varieties of nutrient-rich and drought-tolerant food crops such as iron rich beans and orange-fleshed sweet potato. The diversification process will be conducted through the FFSs, on communal plots, as well as directly through offering targeted households low cost packages to encourage the testing of improved technologies, and in particular cassava. Individual farm households and groups will be eligible for small livestock investments as a general strategy as well as apiculture and aquaculture in specific locations where suitable. Aquaculture will also include the cultivation of Spirulina (blue-green algae), which will contribute to good nutrition. Free-range poultry and goats will provide a safety net for the more vulnerable households with limited access to land. In all cases the livestock interventions and support for off-farm activities will not exceed a financial ceiling of US$300 per household. Approximately 55,000 farm households will be targeted for this activity.

Eligible investmentswill include:

- Draft animals and animal traction equipment; Small livestock such as goats, sheep and pigs eventually provided as a pass-on scheme (particularly appropriate to assist female headed households), etc.[58]; Ponds and equipment for aquaculture; Hives and equipment for apiculture; Equipment for conservation agriculture; Seed multiplication, multiplication of vegetative planting material (beans, soybean, groundnut, cassava, potatoes and sweet potatoes), tree nurseries and orchards, etc.[59]; Equipment for vegetable production (metal poles, small shade houses, irrigation, small scale hydroponic systems) Detailed eligibility criteria for matching grants will be developed as part of pre-start-up activities for the project and included in the PIM

[58] Small stock investments will also be made to secure household livelihoods. Individual farm households and groups will be eligible for small stock investments that include packages that include poultry and goats as a general strategy as well as apiculture in specific locations where suitable.

[59] For cassava and sweet potato it will be necessary to organise lead farmers to multiply improved quality planting materials free of pests and diseases through community-based activities. The project will promote pathogen-resistant and water tolerant cultivars.

b) **Post-harvest Management and Value Addition:** Complementing similar exercises under SAMAP and other projects, a mapping and characterization of value chain actors and opportunities will be undertaken in the four northern provinces. This will facilitate the identification of sound investment ideas with potential for inclusion of FOs. The selection of viable Micro-project Proposals will be guided by the findings of the value chain studies and identified opportunities for FOs to forge partnerships with larger value chain actors. Micro project proposals will be prioritized to enable FOs to increase their productivity, reduce post-harvest losses and respond to increasing market demands for high value products. More basic market appraisal studies will be conducted in the southern provinces to link smallholder farmers and the more enterprising households to market opportunities.

The main activities will be working with economic-oriented groups who have identified business opportunities and profitability as their priority focus to develop their skills and capacity to move their businesses up the market and/or value chain. Activities will include: (a) specialised training in entrepreneurship, market identification and development, business planning, simple PHM improvement and financial management training; (b) assistance to develop business plans for investment in PHM and / or value adding equipment; (c) piloting and demonstrating new PHM and V/A technologies. Small PHM investment grants will be offered to fund investment in new PHM or value adding technologies that is not commercially available or accessible. Following are examples of the types of PHM or value adding activities that farmer groups may wish to invest:

- Maize - shelling, drying and storage
- Beans - cleaning, sorting and grading on size, colour and storage
- Vegetables and fruit - preservation and drying equipment,
- Cassava / maize mills - hullers and huskers
- Cassava - improved post-harvest handling, drying, chipping, waste management
- Sorghum – drying and storage.

Approximately 6,000 households will be targeted for this activity.

c) **Rural Micro and Small-Scale-Agri-Business Promotion:** Matching grants will be offered to youth, women, able bodied persons and entrepreneurial small farmers to provide support services to farm households. Service enterprises could include mechanisation, input delivery, transportation, marketing and business advice. Small entrepreneurs will be supported by training in financial and functional literacy, marketing and business management offered under sub-component 2.1. Selection of activities will be demand driven and drawn from a menu of investment options that include:

- Agricultural production equipment, such as tractors and animal traction equipment sprayers, pumps, etc.
- Agricultural input stocks and equipment
- Agricultural post-harvest and value adding processing equipment, such as: cassava/maize mills, hullers and huskers, oil presses, fruit/vegetable dryers etc.
- Agricultural marketing equipment, such as transport equipment (ox-cart, trailer), etc.
- Small workshops and equipment for manufacturing and repairing inputs for agricultural value chains and rural livelihoods (beehives, cradles for produce transport, efficient cook stoves, solar panel and machinery repairs)
- Facilities for operating micro businesses providing FOs with accounting, IT, market intelligence, logistic and business planning services, etc.

FOs will also be eligible where they have a contractual agreement with one or more members to manage the equipment as a microenterprise, providing services to the whole group. Youth entrepreneurs approved for financing will be linked up with a mentoring programme that matches them with experienced business owners, where applicable. Approximately 4,500 businesses will be supported, mainly in the higher potential northern provinces.

17. **Implementation arrangements:** Sub-components 1.2 and 2.2 will be implemented as matching grants which will be put in place to address partially the financial constraints of the target groups to enable them to procure the necessary inputs, equipment and infrastructure. The matching grant targeting, eligibility, management, level, type of investment, disbursement and monitoring procedures will be detailed in the Project Implementation Manual which will be issued at the beginning of the Project.

18. Technical and facilitation assistance will be provided for: (i) training of EDA, NGO service providers community and farm leaders as required; (ii) facilitation of the participatory planning and implementation processes for community-level and group-based micro-projects and verification of eligibility of communities, groups and their proposed investments; (iii) technical assistance for the screening, assessment and design of proposed investments, such as technical, financial, economic, social and environmental feasibility, as well as (iv) preparation of business, operation and maintenance plans.

19. **Grant Ceiling and Conditions:** The initial ceiling for funding Micro-project investments will be US$100,000. Based on experience elsewhere in Africa, it is estimated that the average rural community-level small investment project cost will be about US$50,000 and the average cost of smallholder group-level SIPs will be about US$25,000.[60]Proposals for infrastructure sub-projects of a pure public good nature, smallholder farmer training and capacity building will be 90% funded by grants facility. Larger Micro-projects of up to $100,000 for some of the rural infrastructure investments under sub-component 1.2, will be screened for technical, financial, social and environmental feasibility before final approval. For assets like storage facilities which are jointly owned and operated by farmers and other value chain partners, and where a proper arrangement is in place for joint management, a 20% beneficiary contribution will be required. Micro-projects such as livestock, seed multiplication etc. that naturally reproduce and can further distribute will be set at a matching grant ration of 90:10 i.e. a 90% project contribution and 10% beneficiary contribution (either in cash or in-kind), under the condition that the beneficiary group agree to a further distribution mechanism under which the whole group or the whole community will eventually benefit. Proposals for small grants of up to $25,000 will be required to include a simple business plan which will be prepared in a participatory manner with farmer beneficiaries and which demonstrates the technical and financial feasibility of the proposal. Average budget per participating household is expected to be in the range of USD 200-300, but could be higher or lower according to circumstances. Some grant financing may be approved for a combination of Micro-project that have been grouped together and consolidated for practical reasons. The applied matching grant ratios and funding ceilings will be periodically reviewed and recalibrated to take account of the changing circumstances and lessons learned during project implementation.

Component 3: Project Coordination and Management (US$ 21.7 million)

20. Component 3 is a cross cutting component to the technical components described above. The lack of institutional capacity is well recognised as a limitation to the effective implementation of projects in Angola. Institution strengthening measures in project management, finance and procurement are crucial to ensure that the Project objectives are achieved. This component includes: (i) SREP day to day management and coordination; and (ii) establishment of a Single Coordination Unit (SCU) to support implementation, capacity building across the IFAD portfolio. The overall coordination and management functions will be performed by a Project Implementation Unit (PIU) under the oversight of the SREP Project Steering Committee (PSC). The SCU will provide Technical Assistance to strengthen the capacity of the IFAD project portfolio. A Portfolio Implementation Facility (PIF) will also be established to strengthen the SCU. Component 3 can, subsequently, be divided into two sub-components: a) the SREP Project Implementation Unit; and b) establishment of the Single Coordination Unit and Portfolio Implementation Facility (PIF). Detailed implementation arrangements are described in Technical Annex 5.

[60]Selection of activities will be demand driven drawn from a menu of options. The crop and livestock based interventions and support for income generating activities should not exceed a financial ceiling of US$300 per household. Recipient households may decide to come together as a group for ease of implementation.

Sub-component 3.1: SREP Project Implementation Unit: *(US$ 15.6 mill.)*

21. SREP will have a project management team consisting of a Project Manager and two team leaders to manage field activities in the northern and southern provinces, respectively. Project management will also include a Finance Officer, a Procurement Officer, and an M&E officer. The Teams will be responsible for the day-to-day management of SREP in the north and south.

Sub-component 3.2: Single Coordination Unit/ Portfolio Implementation Facility: *(US$6.1 mill.)*

22. The Single Coordination Unit (SCU) will be set up to strengthen the capacity of the management staff of the IFAD-financed programme in implementation and fiduciary matters. The SCU will be responsible for coordination of the IFAD project portfolio implemented through the Ministry of Agriculture/IDA. The unit will provide fiduciary management, procurement, planning and monitoring and evaluation support. The SCU will be led by the current SAMAP and ARP Coordinator who will oversee SREP implementation and will be responsible for strategic management of the programme. The SCU will be staffed by a team of Angolan professionals comprising, a Senior Finance Management Controller, a Senior Procurement Officer, a Senior M&E Officer and an Administration Assistant supported by the PIF. The latter will be established as an international/ regional technical assistance unit with the purpose of sourcing International/ Regional Technical Assistance to establish the implementation frameworks of the portfolio and set up systems and provide on the job training to Angolan Counterparts. A Portfolio Implementation Facility (PIF) will also be established to strengthen the SCU. The PIF will support national counterparts through training, mentoring and establishing portfolio management systems (in administration and day-to day management, M&E/result reporting, Financial Management and Procurement)[61]. An “internship” programme will be established to support the country in establishing and reinforcing its institutional capacity to attract, absorb and manage external assistance[62]. As the SCU will be working with IFAD’s ongoing portfolio, the costs of establishment and operation will be divided proportionately between SREP and SAMAP. Technical assistance will also be provided through the SCU in identified technical subjects – FFS development (agronomy), civil engineering, social development, agribusiness development and marketing.

[61] AFD, BADEA and IFAD will to provide financial support to the PIF..

[62] Each year 18 interns (6-finance, 6-project management, 6-procurement) will be competitively hired to form the Luanda based internship programme. Each year 9 interns (3 project management, 3 finance, 3 procurement) will be selected to attend one year training abroad.

Attachment 1: Survey studies of Small-Scale Irrigation Potential in the Southern provinces

Province	Municipality	N° of FFSs	N° of hhs	Irrigation (ha)	Cost per ha	Comments
The river Benguela	Ganda	20	500	20	20,000	High cost because of the need for drilling.
	Cubal	20	500	20	20,000	High cost because of the need for drilling.
	Chongoroi	40	1000	80	10,000	Good river flow. No need for drilling. Large area of potentially fertile land.
	Balombo	20	500	20	20,000	High cost because of the need for drilling.
Cunene	Ombadja	40	1000	80	10,000	Good river flow. No need for drilling. Adequate availability of fertile land for irrigation.
	Cuvelai	40	1000	80	20,000	High cost because of the need for drilling.
	Cahama	20	500	20	40,000	High cost because in some cases will need to construct dams
	Curoca	10	250	10	20,000	High cost as need to construct dams or *Chimpaca* to collect water. Targeted towards the pastoral areas
Namibe	Bibala	40	1000	80	20,000	High cost because of the need for drilling. Considerable fertile land available
	Camucuio	10	250	10	20,000	High cost as need to construct dams or *Chimpaca* to collect water. Targeted towards the pastoral areas
	Moçâmedes	50	1250	100	10,000	Good river flow. Lot of fertile land available
	Virei	20	500	20	20,000	High cost because of the need for drilling.
	Tômbua	20	500	20	20.000	High cost because of the need for drilling.
Total		***350***	***8,750***	***560***		

Attachment 2: Activities per target beneficiary group

	Activity cluster	Detailed activities	Beneficiary groups
1.1 Strengthening capacity for improved services	Activity 1.1.1Climate and nutrition sensitive extension service delivery	Office rehabilitation Extension staff deployment Training of extension and other technical staff	- IDA staff and other professionals - EDA front line extension staff
	Activity 1.1.2 Animal Health Services	Para-veterinarian services	- Municipality veterinarian staff - Community level workers - Frontline extension staff
1.2 Investing in public rural infrastructure	Activity 1.2.1 Feeder road rehabilitation and maintenance	Feeder road infrastructure	- Entire community
	Activity 1.2.2 Market infrastructure	Market infrastructure	- Entire community
	Activity 1.2.3 Sustainable Land and Water Management	Water harvesting Small scale irrigation Soil and water conservation Rangelands management	- Community - Subsistence farmers - Small stable family farmers
2.1 Strengthening capacity for family farming	Activity 2.1.1 Community organization, planning and mentoring	Awareness raising, Training, Planning, Mentoring	- Subsistence farmers, - Market oriented farmers, - Women - Youth
	Activity 2.1.2: Farmer field school establishment and implementation	Training of FFS facilitators	- EDA capacity - Service provider capacity - FFS facilitators - Community facilitators - Lead farmers
		FFS Training of farmers	FFS members
2.2 Investment in family farming	Activity 2.2.1 Agricultural diversification and improved productivity	Crop production packages	- Subsistence farmers - Market oriented farmers
		Small livestock	- Subsistence farmers, - Market oriented farmers, - Women - Youth - Disabled
	Activity 2.2.2 Value addition and marketing	Post-harvest	- Women - Youth - Disabled
	Activity 2.2. 3Rural micro and small scale agribusiness promotion	Micro-enterprises Service providers	- Women - Youth - Rural entrepreneurs - Disabled - Ex-combatants

Appendix 5: Institutional Approach and Implementation Arrangements

A. APPROACH

1. SREP will be implemented over a period of six years, concentrating on priority areas within the target municipalities, where there is high population density, and higher incidence of vulnerable households. In the north implementation will start in two provinces (Uige and Cuanza Norte) and eight municipalities will receive intensive support. In PY2 another five municipalities within these same provinces will be added. In PY3, a further two provinces (Bengo and Zaire) will be added with implementation in eight municipalities. In the south implementation will begin from PY1 in the three provinces simultaneously, but beginning in the same municipalities where ARP is being implemented. The interventions in the south are designed to complement the recovery efforts of ARP by strengthening the resilience of households and communities.

2. Criteria for the selection of municipalities will be included in the PIM and the annual work plans and budgets for PY1, PY2 and PY3 will indicate the proposed municipalities and communes to be covered. The AWPBs will then be subject to approval by IFAD. Any decision to expand target areas will only be justified by satisfactory progress in the initial target areas, as evidenced by annual implementation reviews.

3. The approach to project implementation is based on recognition that: (i) project implementation capacity of IDA and NGO service providers is limited; (ii) many of the farmer organisations and associations already set up are weak and at a fledgling stage of organizational development; and (iii) pro-community policies, such as local empowerment, targeting and promoting gender equity are incipient in Angola's rural development sector. As such, SREP will focus on strengthening the capacity of IDA/ EDA, other government institutions, and local NGO service providers to in turn strengthen the capacity of family farmer groups, associations and cooperatives, locally. Implicit to the design is to develop a "training of trainers'' programme for FFS implementation together with a longer-term strategy of capacitating EDA extension workers and NGO service providers.

4. Given the capacity limitations and the need to closely involve and empower communities and farmers organizations to ensure longer term sustainability, the approach will focus initially on (a) capacity building of extension workers and service providers, (b), a planning process that identifies sites and appraises infrastructure; and (c) investments in infrastructure and community, group and household activities.

5. SREP will need to rely on service providers for the implementation of activities outside the core competencies of IDA and capacity building of these service providers by the project will be essential to ensure effective and sustainable implementation. The sequencing of implementation in the SREP-supported provinces is given in the figure below.

6. Initially efforts will concentrate on capacity building of service providers (IDA extension staff and NGOs) through a concerted training programme that involves a needs assessment and the design and organising a series of training programmes in agricultural production, natural resource management, climate change, environmental management and nutrition. As new vacancies for extension workers become filled over the course of the first year of implementation additional training programmes will be organised. In the northern provinces, SREP will target, as a priority for implementation, Uige and Caunza Norte, where the highest concentration of farm households can be found. Other capacity building activities will include planning for rural infrastructure: site selection and the preparation of feasibility studies. In the northern provinces investments in infrastructure, FFS establishment and investment will take place from year 2. From year 3, SREP will move into the remaining 2 provinces in the north – Bengo and Zaire.

7. In the southern provinces SREP will build on the community development/ FFS activities of ARP. Investments to support resilience, at household level, will be made immediately following support staff organization and capacity building. Rural infrastructure site selection and feasibility study preparation will begin immediately and investments could be made in the last six months of year 1. Community and household investments will similarly be made at that time. For non ARP areas the process of

social mobilization, planning and FFS establishment will begin towards the end of the first year and investments made from year 2. FO consolidation will occur from the end of year 4. A two year period is assumed for consolidation following the fully 30 months of FFS implementation. During the consolidation period focus will be placed on linking farmers to markets and building the management and financial capacity of FOs.

Table 1: Sequencing of implementation

		Years					
Activities	**Location**	**PY1**	**PY2**	**PY3**	**PY4**	**PY5**	**PY6**
Capacity building of IDA/EDA extension workers/ service providers	All provinces						
Northern provinces							
Community mobilization/ planning	Uige, Cuanza Norte						
Rural infrastructure: Site selection/ feasibility studies	Uige, Cuanza Norte						
FFS organization/ establishment	Uige, Cuanza Norte						
Rural infrastructure investments	Uige, Cuanza Norte						
Community/FFS/ HH investments	Uige, Cuanza Norte						
FFS/ FO consolidation	Uige, Cuanza Norte						
Community mobilization/ planning	Bengo/ Zaire						
Rural infrastructure: Site selection/ feasibility studies	Bengo/ Zaire						
FFS organization/ establishment	Bengo/ Zaire						
Rural infrastructure investments	Bengo/ Zaire						
Community/FFS/ HH investments	Bengo/ Zaire						
FFS/ FO consolidation	Bengo/ Zaire						
Southern provinces							
Rural infrastructure: Site selection/ feasibility studies	ARP areas						
Rural infrastructure investments	ARP areas						
Community/FFS/ HH investments	ARP areas						
FFS/ FO consolidation	ARP areas						
Community mobilization/ planning	All other areas						
Rural infrastructure: Site selection/	All other areas						
FFS organization/ establishment	All other areas						
Rural infrastructure investments	All other areas						
Community/FFS/ HH investments	All other areas						
FFS/ FO consolidation	All other areas						
Phasing		**Phase 1:**		**Phase 2:**		**Phase 3:**	
		Capacity building		Investments: roll-out		Consolidation	

Table 2: Sequencing of Implementation: Beneficiary Coverage

		PY1	PY2	PY3	PY4	PY5	PY6	Total
1. FFS only								
1.a. FFS only Bengo/Zaire	HH	3832	7608	5200	5200	4200	5230	*31270*
1.b. Bengo/ Zaire other extension	HH		300	800	2000	3000	4000	*9800*
1.c. FFS only Uize/Cuanza Norte	HH	5748	11412	7800	7800	6300	7846	*46906*
1.d. Uige/ Cuanza Norte other extension	HH		500	1000	2200	4000	6000	*13700*
1.e South drier areas	HH	1587	4923	2700	2700	2700	3362	*17972*
1.f South wetter areas	HH	1058	3282	1800	1800	1800	2242	*11982*
1.g. South other extension	HH	786	1200	1500	2000	2000	2600	*10086*
2. Grants								
2.1.a. Grants only Bengo/Zaire	HH	420	1036	3640	3780	3808	2750	*15433*
21.b. Grants only Uize/Cuanza	HH	630	1554	5460	5670	5712	4124	*23150*
2.2.a.Grants for south drier areas	HH	270	666	2340	2430	2447.82	1227.6	*9381*
2.2 b. Grants for south wetter areas	HH	0	1000	2000	2000	2000	0	*7000*
3. Off-farm activities	HH	180	444	1560	1620	1631.88	818.4	*6254*
3.a Post harvest enterprises								
3.b Service provider enterprises	HH	15	650	1400	1500	1300	1200	*6065*
Total households	HH	0	1200	2200	2000	1800	1800	*9000*
								218000
Irrigation (south)								

B. KEY IMPLEMENTING INSTITUTIONS

9. MINAGRI will be the lead executing agency and will work closely with the other line ministries and partners whose mandates have a direct bearing on the achievement of the Project goal and development objectives. The Project delivery systems will be integrated into the decentralized government organisational and operational structures that cascade from the national level to communal level.

10. **National Level** – MINAGRI will delegate it responsibility to the Institute for Agrarian Development (*Instituto de Desenvolvimento Agrário* - IDA). As part of its mandate, the institution is responsible for supporting smallholder agriculture in the country, promoting production increases and the improvement of livelihoods of rural households which fits in well with objectives of SREP. IDA will take the role of the main implementing partner on behalf of MINAGRI. It will play a key role in both the overall project management and the coordination of government and non-government agencies participating in the Project.

11. **Provincial Level** – At the provincial level, the MINAGRI Provincial Directorates are responsible for the agriculture sector support and policy issues relating to their respective provinces, as well the overall coordination of the actions carried out by the agricultural institutions present in the province. The involvement of the provincial directorates of agriculture will be important for overall oversight of provincial Project implementation at field level by IDA/contracted service providers.

12. **Municipal Levels** – As the majority of Project activities will take place locally at the Commune and Municipal levels, the *Estacões de Desenvolvimento Agrário (*EDAs) will play a critical role. EDAs are the field offices of IDA at municipal level; this is where frontline extension staff is located. They are responsible for extension and capacity building of farmers. They are also responsible for collecting data for MINAGRI and for implementation of various government-sponsored programmes. The staffing of the IDA's in the field, is very limited and their administrative and technical capacities are generally weak. The project will provide both institutional capacity building to EDAs (including office and housing facilities and equipment where necessary) and targeted technical assistance through service providers working closely with EDA staff.

13. **The Veterinary Service Institute (ISV)** – The Project has interventions in the area of small livestock. Therefore, ISV will work closely with and provide advice to IDA and EDAs on all aspects related to the Project's livestock activities in the areas suitable for livestock raising. It may be called on to participate in the Project Coordination Committee.

14. **The Angola's Coffee Institute (ICA)**: ICA will play an advisory role for the implementation of the Project in relation to coffee, which can be found in the northern provinces. It will provide advice to

IDA and EDAs on all aspects of coffee production and may be called on to participate in the Project Coordination Committee.

15. **Other Ministries** – SREP will have implications for some other ministries, in addition to the Ministry of Agriculture. The most obvious ones include: a) Ministry of Finance (MoF) – This is the representative of the borrower. In addition, it is responsible for the financial supervision of all government programs; it is also responsible for supervising the budget process and the allocation of project financing for all those projects with external sources of financing; b) Ministry of Social Action, Family and Promotion of Women (MASFAMU) will be instrumental to ensure appropriate mechanisms for gender and targeting; c) Ministry of Health – the recurring droughts in the south, have resulted in a considerable degree of malnutrition. The Ministry will interested in ensuring that nutritional aspects of the target beneficiaries are progressively being addressed; and d) Ministry of Environment – this will be a major stakeholder in the SREP implementation; many of the capacity building activities will directly involve the Ministry; d) Other Ministries will include Ministry of Commerce (marketing); Ministry of Industry (processing) and Ministry of Education (middle level agricultural schools and literacy/ numeracy training)

16. **Technical Service Providers (TSPs**) – These will play a critical role during SREP implementation. All Projects have been/are being implemented through different service providers. These range from UN agencies, such as FAO, to specialised NGOs. In addition, services of consultancy firms and/or individual consultants may besought during the course of SREP implementation. The Sub-projects will finance, specialized TSPs, resident in Angola, with distinct terms of reference (TORs) and specific experiences in FFS extension and community development and with capacity to identify and train local service providers. The TSPs will help to identify viable micro-projects, prepare business plans, and provide technical oversight of their implementation and, provide technical assistance and business management and social mentoring. As stipulated in Appendix 8: Procurement, the needed services will be procured following the appropriate procedures to ensure the effective achievement of the SREP objectives.

17. ***FAO:***Following the successful experience of the MOSAP project co-funded by IFAD/World Bank, SREP will benefit from the expertise and services of FAO for the implementation of the Farmer Field School methodology, although effort will be made to draw on national staff that have already undergone such training.

18. ***NGOs****:* there are well-established national and international NGOs with long experience in working with local communities and also in establishing and reinforcing farmers' groups and developing their capacities. Their major weakness is the lack of experience in supporting climate change, sustainable land management, linking farmers to markets and developing partnerships between smallholder farmers and the private sector. SREP includes capacity building activities for the NGOs as service providers.

19. ***Consultancy firms and individual consultants****:* There is a wide range of competent consultancy firms and independent consultants with working experience in the implementation of agricultural and related value chain projects in Angola that can provide the services required by the Project. They may lack experience in working with rural communities and informal traders.

20. In addition to the entities mentioned above, banks, agriculture traders and processors, commercial farm operations, agro-dealers and other partners may also be involved in the implementation of project activities.

C. Project Management Structure

21. SREP has been designed to ensure simplicity in project implementation by building on the implementation arrangements designed for SAMAP and ARP in the central and southern regions, respectively. An innovative element to these arrangements is the establishment of the Single Coordination Unit (SCU) to coordinate and oversee the IFAD investment portfolio being implemented through the Ministry of Agriculture and Forestry(MINAGRIF). These considerations are also a

response to the IFAD CSPE which noted the need to adjust to the limited implementation capacity in Angola and build on lessons learned from project implementation in the country.

22. The project will be implemented by IDA, from the National to Municipal level, with strong coordination and consultation mechanisms with the relevant government stakeholders and authorities at different levels. The institutional framework for execution is as follows:

23. SREP will be coordinated through the establishment of a **Project Implementation Unit (PIU)**, staffed by a Project Manager, a Finance Officer, a Procurement Officer, and an M&E officer. The Project Manager will be supported by two Team Leaders, one for the north and another for the south, respectively. The Team Leaders will be deployed in provincial offices. The Team Leaders will be responsible for the day-to-day management of SREP in the north and south.

22. Focal Points will be designated by public sector entities (outside MINAGRI). They should have proven technical capacity in their sector (e.g. roads, education) and will be responsible for facilitating inter-sector coordination and providing specialized knowledge and input to the team leaders on project annual reports, terms of reference, and other aspects.

23. **Provincial Project Implementation Units (PPIUs):** Four Provincial Project Implementation Units (PPIUs) will be established. In the four northern provinces, two Provincial Units will be set up; one in the town of Buanzo Congo covering Bengo and Zaire region; and another in the town of Uige covering the Uige and Cuanza Norte region. For the south two more Provincial Units will be set up in Benguela and Namibe. The units will be located in EDA offices. Given the distances involved three sub-unit offices will similarly need to be set up in the provinces where there is no project representation. Tentative locations include sub-offices in Bengo province (the town of Caxite), Cuanza Norte, (Mdalatondo), and in Cunene (the town of Ondjiva). Selection of locations were made considering criteria such as: easy access to other target municipalities, presence of IDA/EDA staff and current office conditions. These locations, however, should be regarded as tentative with a final decision to be made by IDA in collaboration with the Provincial Governments.

24. The PPIUs will be lightly staffed, as most of the investment and technical support duties will be implemented by service providers and fiduciary management will mostly be done centrally. The four main PPIUs will include an Area Manager, an Assistant Finance Officer, an Assistant Procurement Officer; an Administrative Assistant, a Secretary and a Driver. For the Sub-offices the personnel will include an Area Manager, an Administrative Assistant and driver. See Figure 6 below. The Area Managers will work in close collaboration with the Provincial Directors of IDA and the Heads of EDA Offices in the target municipalities and will be expected to assist in strengthening local capacities. There will be 2 M&E officers for each of the project areas – north and south - and 3 M&E Assistants (1 in the south and 2 more in the north). Decisions regarding their deployment will be made later.

25. The responsibilities of the SREP Team Leaders will include technical supervision and coordination, overall project planning, quality oversight, communication, reporting of Project activities and progress on a regular basis. Fiduciary issues will be managed in conformity with the standards and requirements agreed upon with IFAD, in accordance with the Financing Agreement and other Project documents, such as the Project Design/Appraisal Documents and the PIM. Support in fiduciary matters will be provided by the SCU. The designated team leaders will come under the supervision of the SREP National Project Manager and will accountable to the Director General of IDA. SREP staff, at all levels, will receive capacity-building assistance from the SCU to support project implementation technically, operationally and administratively, and especially to strengthen M&E capacity.

26. **Single Coordination Unit** – A Single Coordination Unit (SCU) will be established to ensure ease of coordination and oversight, ensuring cost efficiencies through shared functions, and developing capacity of IFAD project management staff in fiduciary issues for more effective implementation. The SCU will be responsible for the overall coordination of the IFAD programme

portfolio implemented through MINAGRI, including SAMAP, ARP and SREP[63]. The SCU will be led by the current SAMAP-and ARP Coordinator who will oversee SREP implementation and will be responsible for effective coordination of day-to-day operations. The unit will be responsible for fiduciary management, planning, monitoring and evaluation. The SCU will be staffed by a team comprising, a Financial Management Officer, a Procurement Officer and a Monitoring and Evaluation (M&E) Officer. These positions will be financed by SAMAP. Technical support will be provided to strengthen the management and fiduciary capacity of IFAD's programme, as recommended by IFAD's Country Strategy and Programme Evaluation (CSPE). Technical assistance in key subject areas will also be available within the SCU to support the technical capacity of project staff, service providers and beneficiaries. These will include amongst others, experts in Civil Engineering, Environmental Management, Farmer Field School (agronomy), Social Development, Agribusiness and Marketing and Water Resources Development. The SCU will host the SREP National Manager, two M&E Officers (for the two subprojects), a Procurement Officer and a Finance Officer. As the SCU will be working with IFAD's ongoing portfolio, the costs of establishment and operation will be divided proportionately between SREP and SAMAP.

27. **Portfolio Implementation Facility (PIF)**: The PIF will be established to strengthen the SCU by sourcing International/ Regional Technical Assistance to set up implementation frameworks and systems and provide on the job training to Angolan Counterparts. The PIF will also support national counterparts through training, mentoring and establishing portfolio management systems (in administration and day-to day management, M&E/result reporting, Financial Management and Procurement).[64] An "internship" programme will be established to support Angola in establishing and reinforcing its institutional capacity to attract, absorb and manage external assistance[65]. Technical assistance will also be provided through the SCU in identified technical subjects – FFS development (agronomy), civil engineering, social development, agribusiness development and marketing.

[63] SAMAP staffing includes a Project Manager, a Financial Management Specialist, a Procurement Specialist, an Accountant and an M&E and Knowledge Sharing Specialist. These positions will be absorbed by the Single Coordination Unit. The SAMAP Project Manager will take on the role of Single Coordination Unit, Programme Manager. ARP is being implemented at provincial level through an office in Lubango, Huela. The project team consists of a Project Manager; Accountant; Procurement Assistant; Monitoring and Evaluation Assistant; and Project Assistant with SAMAP playing an oversight role. The fiduciary specialist responsibilities will be extended to provide support to SREP.

[64] AFD, BADEA and IFAD will to provide financial support to the PIF..

[65] Each year 18 interns (6-finance, 6-project management, 6-procurement) will be competitively hired to form the Luanda based internship programme and a further 9 interns (3 project management, 3 finance, 3 procurement) will be selected to attend a one year training abroad.

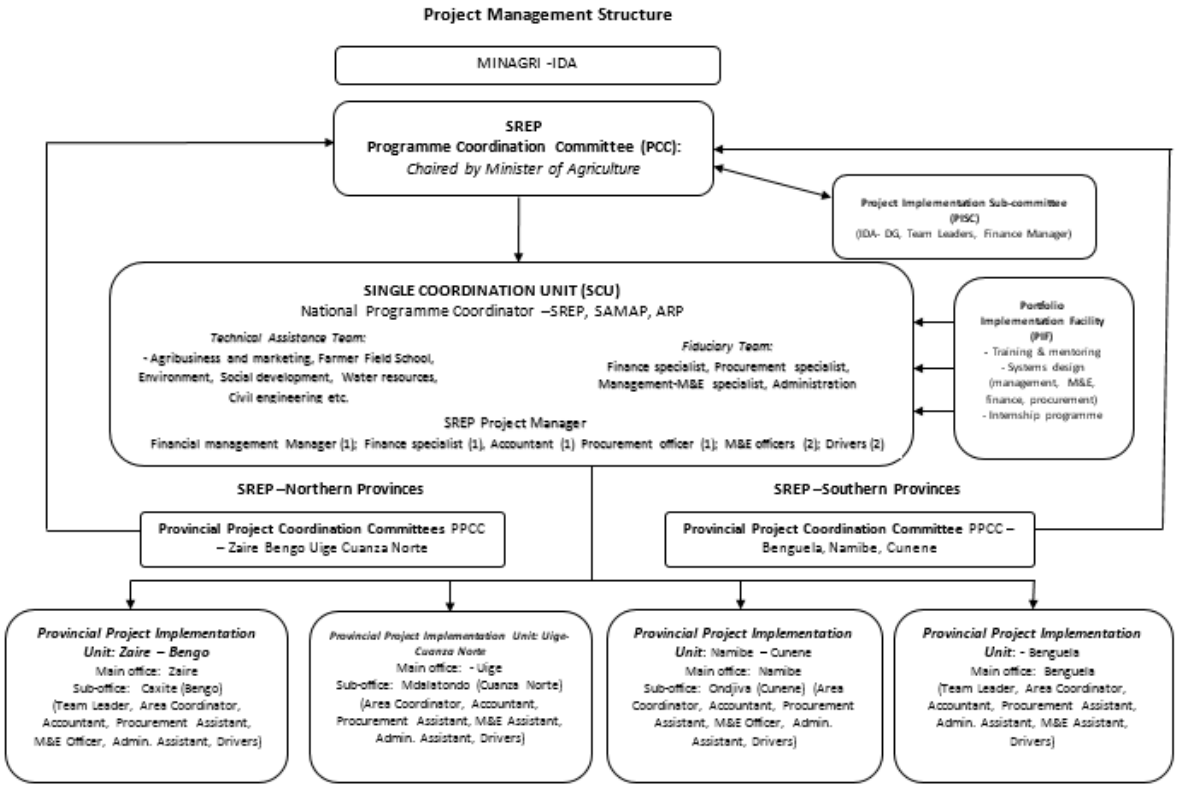


Figure 6: Project Management Structure

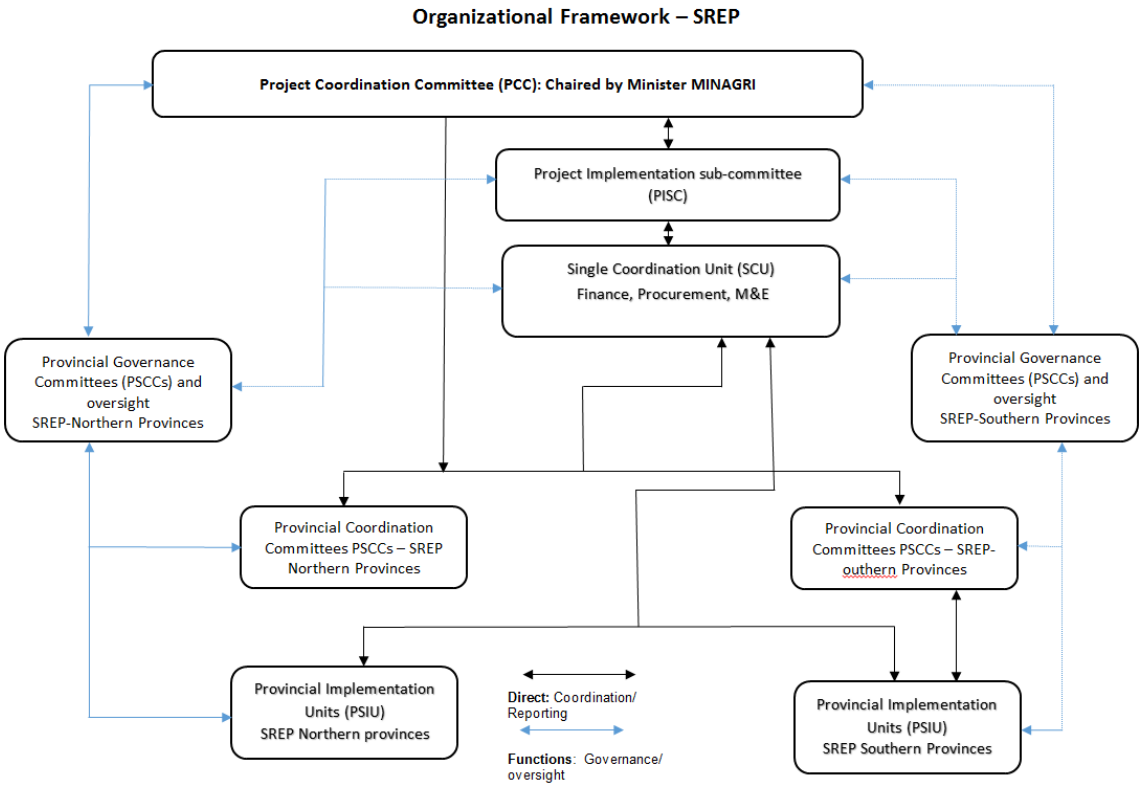


Figure 7: Project Organizational Framework

D. Oversight bodies

28. The oversight bodies at two different levels, national and provincial, are described below, and summarised in Figure 7.

29. **Project Coordination Committee(PCC)-** At the national level, MINAGRI will be supported by a Project Coordination Committee(PCC). The PCC will be chaired by the Minister of Agriculture or his nominee, and composed of membership from institutions with direct relevance to the achievement of SREP's goal and development objective. The PCC will be responsible for the strategic direction, operational oversight of project activities and implementation progress, communication, and overall good governance of the project. It will: a) provide political and strategic guidance and facilitate inter-sectoral coordination for activities not directly under MINAGRI; b) review and approve the Annual Work Plans and Budget for the Project Implementation Teams; and, c) review annual project reports and support problem resolution. The Director General of IDA will be the Secretary of the PCC. It will meet at least two times per year or more frequently, as and when need arises.

30. **Implementation Sub-committee-** Implementation Sub-Committees will be set up for each of the project areas – north and south. The sub-committees will have executive and technical responsibilities. The implementation sub-committees will consist of (at least) the IDA Director General, the SREP Project Manager, the respective Team Leader and the Financial Management Officer. Its task will be to: speed-up decisions and procedures; (ii) approve micro-projects under Sub-components 1.2 and 2.2 that may require central level decision making (based on the feasibility studies prepared by the PIT); (iii) propose the agenda for the PCC meetings and prepare the support documents; (iv) propose the Annual Work Plan and Budget (AWPB) to PCC for analysis and decision; and (v) submit Annual Report of micro projects. The implementation sub-committees will, in addition, include representatives of NGO or civil society and a representative of the private sector, when deciding on the approval of micro-projects.

31. **Provincial Project Coordinating Committee (PPCC) -** At the provincial level, there will be a Provincial Project Coordinating Committee (PPCC) in each participating province. The composition and tasks of the PPCC will reflect the composition and tasks of the PCC. The PPCC will include the Provincial Director of Agriculture, the Provincial Director of IDA and the Area Project Manager, a representative of civil society or NGO, a representative of the private sector and two (minimum) representatives of beneficiaries/producers' organisations. The PPCC will also meet twice a year, or more frequently, if required. The responsibilities of the PPCC will include: a) speeding up decisions and procedures; b) review and approval of the beneficiary and micro-project selection processes; c) review the provincial level AWPB prepared by the Provincial Directorates of Agriculture and the main area service providers; and d) review the provincial level annual Project implementation progress reports. The PPCC will also meet at least two times per year or more frequently, as and when need arises.

32. **Provincial Governance Committees (PGC)** – In addition to the PPCCs, PGCs will be established in each of the participating provinces to ensure good governance and accountability during Micro-project implementation. They will be composed of local authorities and traditional leaders who will be supported, as and when the need arises, by a representative of the oversight agents. The role and functions of the PGCs will be to oversee implementation from a good governance and accountability perspective. With the Micro-projects being demand responsive with the preparation of business plans and micro-project proposals, the process of deciding on the approval of plans/ proposals and the selection of beneficiaries could, potentially, generate some grievances. The PGCs will establish a grievance mechanism which will be used to address any grievances that could develop during the course of SREP implementation. The PGCs will keep records of evidences and complaints with minutes of the discussions, recommendations and decisions taken. The PGCs will establish detailed mechanisms for the grievance and complaint process, describing format, language, time for reply and alternative resources, including access to Courts of Law as a last resort after exhausting all the viable peaceful local alternatives/options. Permanent and open dialogue will also be promoted as this is the most suitable way of peacefully addressing any grievances expressed. A team of oversight agents will be designated and entitled to spot-check the approval process at the PGC level to ensure fairness and transparency and will report to the PCC. The PGC for Uige and Cuanza Norte will include as a PGC member a representative of the wildlife authority.

33. **Micro-project implementation arrangements:** Components 1.2 and 2.2 of SREP offer demand-based support, in the form of matching grants to rural communities and smallholder groups, for small-scale agricultural infrastructure, production, processing and marketing sub and micro-projects. The project implementation arrangements include the following steps and elements: (i) *Identification:* Originates at the beneficiary level, through a facilitated participatory development planning exercise, resulting in an identified micro-project proposal. Components 1.1 and2.1 will support the formation and capacity building of smallholder groups and associations to identify and prepare subprojects, and will strengthen the capacity of service providers, primarily the EDA's, to facilitate participatory planning exercises. The micro-project proposals will be submitted to the local EDA. (ii) *Appraisal*: EDA and/or selected service providers will prepare the respective micro-project documentation for submission to the PPIU, mobilizing technical assistance from the PPIU. All micro-projects will be screened for feasibility. With the consent of the municipality administrator, the EDA will submit the sub-project document to the PPIU. (iii) *Evaluation*: All sub-project proposals will be evaluated by the PPIU. This will include verification of all eligibility and feasibility criteria. Based on the dimension, and following due local procedure, certain micro-projects will be classified as "micro-projects for central level decision", and will be referred to the PIU for further processing and evaluation. (iv)A*pproval*: Depending on the project cost and based on the pre-set criteria and the project implementation manual, the micro-projects will be approved either by the PISC or the PPISC. (v) *Implementation*: Depending on the classification of the micro-projects, either the PIU or the PPIU will be responsible for the administrative procedures (financial and procurement) of micro-project implementation. Whenever possible and justifiable, procurement will be done with the full involvement of the beneficiaries.

Appendix 6: Planning, M&E and learning and knowledge management

Overview

1. A knowledge management system, comprising information management, monitoring and evaluation (M&E), communication and innovation and experimentation, will be developed for SREP. The objectives of the developed system will be to:

- Monitor and guide project implementation in terms of relevance, efficiency and success in impacting the lives of the target groups;
- Share knowledge for use in learning, up-scaling and policy development; and
- Evaluate project impact.

2. The system provides data, information and feedback to improve the effectiveness, efficiency, sustainability, relevance and impact of project activities. The project log-frame and intervention logic provide a complete set of indicators for monitoring project progress towards the development objectives, while more detailed activity plans are in place for monitoring physical implementation. The project development objective originates from the IFAD Country Strategic Opportunities Paper (2018), and forms part of the overall monitoring of the IFAD country programme in Angola.

3. The Project Implementation Unit (PIU) will establish an M&E system, satisfactory to IFAD, prior to project implementation. The M&E system will be connected and inter-linked at all levels and will consider the effects / impact of project investments on project beneficiaries and key stakeholders. The M&E system will include financial and physical reporting, the Government of Angola (GoA) reporting requirements and IFAD's reporting requirements, including RIMS.

4. A key output from monitoring will be development of annual data on people's progress in becoming more resilient, disaggregated wherever possible by gender and youth. Monitoring will cover process (group formation, implementation) and progress (number of people actively participating, activities being implemented) monitoring. Impact /outcomes will be monitored and assessed as groups complete their programmes of activities that will contribute to outputs and outcomes. Municipal and commune level implementers such as local government and farmer organizations (cooperatives/ associations) and service providers / strategic partners, where used, will undertake most of the project monitoring – they will be provided with guidance and training on how this is to be done and held accountable for delivering results. Important elements of the monitoring processes include being:

- **Integrated into local level systems.** Planning and monitoring will be led by municipality and commune staff, supported by the SCU.
- Publically **available**: The data will be publically available and provide information to all stakeholders.
- **Participatory**: Stakeholders involved in implementation and beneficiaries themselves will play an active monitoring activity and performance of implementing partners, as well as modifying implementation approaches and activities.

5. **Knowledge and results based** so communication can inform policy development and efficiency and relevance of project implementation and ensure achievement of results though: 1) specialised studies at baseline and completion for impact evaluation and 2) establishment of beneficiary databases for progress monitoring.

6. Project results are expected at three different levels (impact/outcomes/outputs) which are reflected in the Project Logical Framework (see above). At each level, indicators have been developed to be integrated into the Results Monitoring Framework (RMF) taking into account IFAD's Results and Impact Management System (RIMS). The indicators will be operationalized in the form of an M&E Plan prior to Project start.

7. The PIU will be responsible for setting up an effective Planning and Monitoring & Evaluation (PME) System during the first six months of Project implementation which includes fine-tuning the

M&E Plan, in consultation with the main Project stakeholders. The PME System will be part of an integrated PME/Information, Knowledge Management and Communication System (IKMC) to provide: (a) timely and accurate information on implementation progress and constant feedback for decision making and addressing potential plan deviations and problems during implementation; and (b) the basis for assessing the achievement of Project results. The Logical Framework and M&E Plan may be revised at a later stage if required. The logical framework approach will be applied to planning Project interventions at all levels (including FO Action Plans), actively involving the beneficiaries in the formulation of objectives and indicators.

Principles

8. SREP will use the guidelines below to collect quality data and analyse data collected in order to monitor project`s performance produce project reports that inform the country policy makers and development partners on the performance of the project.

9. For effective functioning of its monitoring and evaluation system, SREP will carry out the following actions:

- Harmonise its M&E framework with other M&E systems in the project area especially SAMAP and ARP projects as well as the capturing of key indicators that contribute to government action plans and strategies;
- Setup operational modalities to capture outputs and outcomes indicators on SLM (sustainable Land Management) systems, GAP(Good Agricultural practices), ecosystem status, and follow-up food security enhancement and increase income as well as progress in gender, youth and other vulnerable population;
- Use of Logical Framework and Annual Work Plan and Budget (AWPB) as planning, monitoring and evaluation;
- Involve beneficiary communities and implementing partners in data collection and analysis.
- Develop learning, innovation and knowledge management mechanisms supporting in particular policy processes and up-scaling.

10. **Information Flow**

11. The M&E should enable a proper flow of information to and from the primary stakeholders to the PCU and the Single Coordination Unit (SCU), and especially the provision of timely and adequate information for decision-making by Project Management and the Agriculture Development Institute (IDA) of the Ministry of Agriculture (MINAGRI). Taking into account that the implementation of M&E system means gathering and managing information, participatory methods will be approached. In this regard, primary stakeholders, whom the data pertain, should be involved from data collection to analysis. As such, it is aimed to achieve a sound leaning processes and avoiding to have much data lying around, less information, little knowledge and hence very little use of the original data for decision making.

12. The six steps in planning data and information management in the M&E system are indicative of a more detailed plan which will be developed in the project start-up. However, this report will advance cope with short insights on these topics to introduce the forthcoming section focussing the formal processes while preparing for informal participatory approaches as follows brief description of M&E journey of data.

1) **Data collection** – is the starting point of SREP implementation, taking place from project sites. Data providers are the primary stakeholders in the framework of FFSs. Field data collectors are service providers, including the technicians selected for this purpose amongst the existing local capabilities to perform M&E tasks. Those will further hand over the data to other relevant

at municipal level stakeholders at EDAs or MINAGRI municipal division (Repartição/Direcção municipal).

2) **Data recording** – this step will take place at municipal level, involving either at EDA or at MINAGRI Municipal Division, depending on the existing department with capacities to perform the tasks. Even though most of the municipalities face limitations in public electricity supply in, it would be desirable that this task should be carried out with digital devices (smartphones, tablets and/or laptops). If this is the case, some training on digital handling would be required to scale up the technicians skills in these technologies.
3) **Data storing** – this task will start at provincial level by aggregating data flowing from the inherent municipalities. Supervised be the Head of IDA Provincial Department, the spreadsheets and/or templates will be synthesised by technicians selected and afterwards the material will be forwarded to PIU.
4) **Data collation** – this is activity is developed by PIU staff. Once the data has been received from municipal level and revised at provincial level then it is sent to PIU to be synthesised by PIU team, under responsibility of M&E assistant.
5) **Data analysis** – the analysis of data will be carried out by PIU team with participation of project manager. The applied methodology will be in dependence of existing experiences and capacities to manage the data. Data will be analysed and transformed allow interpretation and visualisation. Furthermore, the achievements will be shared a wider audience that includes PIU staff and project collaborating partners.
6) **Information feedback and dissemination** – the date is translated into information. Following the results assessments through indicators to allow the onset of project implementation the information should be shared with stakeholders involving everybody from project primary stakeholders to implementing partners and IFAD staff.

13. In summary, the M&E system includes three steps: a) Planning for quality communication and reporting, b) Planning critical reflection processes and events c) Planning for the necessary conditions and capacities. The whole project M&E system planning will be addressed in detail during SREP start-up. This will encompass the assessment of time, budget, level of expertise and core information needs to run the proposed M&E system.

Key indicators

14. The Logical Framework is presented in the executive summary of the project design report. It is used as a core framework for results-based management of the project. The goal and development objective level of the framework logframe track improved food and nutrition security in rural households and increased production and resilience of farm households.

15. These indicators will be monitored through the project baseline survey that will capture the core indicators and a household resilience scorecard covering SREP target population. The goal of the project will be monitored by the number of households reporting improved food security and good dietary diversity, this will be disaggregated by gender of household heads. The objective of the project will be monitored by i) households that report at least a 30% increase in productivity. ii)No of HH reporting a >50% increase in resilience score.

16. Monitoring of household resilience is complex because of the multiple factors impacting on resilience. For the measurement of household resilience a resilience scorecard will be used inspired by the DFID KPI4 Methodology.[66] This methodology has a pragmatic approach to address the multifactor complexity. It only focuses at monitoring the risk and vulnerability aspects the project seeks to address or is likely to influence. It does not monitor absolute resilience but changes in resilience of the beneficiaries compared to the baseline. The questions proposed and the draft resilience scorecard are presented in annex 4 to this appendix linked to the project supported activities addressing climate risks and vulnerabilities.

17. **For component 1,** the outcome indicators focus on i) Strengthened institutional capacity to

[66] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328254/BRACED-KPI4-methodology-June2014.pdf

deliver services to enhance food security, productivity and resilience; and ii) Rural infrastructure to build resilience and enhance productivity and market access. The indicators are: i) number of family farmers reporting regular use of advisory and support services (disaggregated by gender and age); ii) Number of households reporting use of climate information services (disaggregated by gender and age); iii) number of households with improved access to water, land and road infrastructure.

18. Key output indicators include: i) No. of government-employed staff participating in training programmes run by the project during the period under review. (disaggregated by gender), ii) No. of kilometer of rural roads constructed and/ or rehabilitated, iii) No. of hectares under SLM (including rangelands), iv) No. of households reporting improved access to water resources for productive and domestic use (data disaggregated by gender of household heads)

19. **For Component 2** the outcome indicators are i) Farming families acquire skills and technologies for food and nutrition security, enhanced resilience/ productivity and market access; and ii) Improved profitability of farm and non-farm income generating activities to improve access to food.

20. The key outcome indicators are i) the number of HH applying climate resilient technologies and practices, ii)the number of HH reporting 30% increase in percentage of agriculture output sold in market.

20. Key output indicators include: i) Number of farmers reporting the use of knowledge acquired through the FFS training (disaggregated by gender and age); and ii) No of households reporting use of production inputs and or technological practices

Planning and M&E system

21. Planning of project activities will be an on-going and participatory process coordinated by the SCU with support from the provincial and communal offices of the southern and the northern provinces. Two sub-regional offices Annual Work Plan and Budget (AWPBs) will be the base for planning. This consolidated AWPB will be consolidated at national level to report on the project progress. The AWPB, together with the Logical Framework's results-based indicators, will be the basis for monitoring project progress. Monitoring will capture all four levels of results (activities, outputs, outcomes and impact at development objective and goal level) on a continuous basis. M&E will be done on particular period and the findings from M&E will be enriched with feedback that comes from on-going generation of lessons learned, best practices, beneficiary and stakeholder stories also defined as learning and knowledge management.

22. The AWPB will be the key instrument for implementation and operational control. The AWPB for the first year will be based on the SREP Project Design Report and its Attachments and will be revised by the project team at start-up. Training will be given to project staff at all levels and the SCU in the preparation of AWPBs. The subsequent AWPB will follow the project overall planning and design with adjustment made when necessary based on recommendations from joined IFAD-GoA supervision missions. These subsequent plans shall include a brief description of the implementation of the project in the previous period and the possible challenges and opportunities for the upcoming year. The plan must also include: (i) the results obtained by component and the proposed plan for the next year including execution times and specific targets; (ii) the estimated budget by category of expenditure and sources of financing, (iii) procurement plan; and (iv) the M&E plan for the year.

23. The AWPB will be the base for implementation and operational control. The AWPB for the first year will be based on the SREP Project Design Report and its Attachments and will be revised by the project team and PCC (Project coordination committee) at start-up. Training will be given to the PIT, PPIU and SCU, on the preparation of AWPBs. The subsequent AWPB will follow the project overall planning and design with adjustment made when necessary based on recommendations from joined IFAD-GoA supervision missions.

24. The Director General of IDA will act as the chairperson to the Programme coordination committee (PCC). The SCU will act as the secretary of the committee. The PCC will meet twice a year to discuss issues concerning the project.

25. A project inception workshop will be held before start-up of project with the SCU team, IDA/EDA staff, PIT, PPIU, stakeholders, relevant government counterparts and IFAD. It is crucial to build ownership of the project's goals and objectives and presents the modalities of implementation and execution, as well as providing inputs to the annual work plan and budget for the first project year. A report will be produced after the workshop and shared with participants.

26. **Start-up activities**. The most common reason for project implementation delays, is at project start-up. The SREP design process will provide as much detail as possible, outlining the implementation strategy in great detail. There should not be a need for specialised studies at start-up, other than collection of updated baseline information. Rather the focus will be on conducting baselines, setting up the systems and agreeing with strategic partners on modalities and outcomes of cooperation.

27. Internally, there will be start-up workshop for project staff and ministry officials directly involved in project implementation with the participation of IFAD as presenters, focused on implementation arrangements, setting the stage for updating and validating the Project Implementation Manual (PIM) and preparing the Annual Work Plan and Budget (AWPB.

28. A public launch will be held in the two SREP regional locations with project staff and a wide range of stakeholders. Conjointly, or immediately after the launch, the technical staff involved in project implementation will prepare and validate the AWPB, for their respective target areas. All staff will participate in this, including drivers and office attendants, for everyone to understand their role in reaching the development objective of the project.

29. This will be followed by an information campaign on identifying location for feeder roads, market infrastructure and irrigation schemes in the target municipalities. The launching process will also sensitise beneficiaries to the upcoming surveys to be undertaken, and alert possible service providers of upcoming calls for proposals.

30. Local organisations should be fully consulted and involved in the development of the M&E system at local level and in adjusting the logframe in the course of implementation. Additional quantitative and qualitative indicators could be added to the logframe on a participatory basis and particularly at the output level. These will complement the main list of indicators currently presented in the Logical Framework

31. The logical framework will be used in establishing the main M&E activities and responsibilities among the project's different stakeholders (IDA, EDA. SP, NGO. MINAGRI, SCU…. etc.); and to prepare a quality report based on standard tables of indicators. Also, information on the frequency and method of collection of information as well as datelines for submissions of reports will be communicated to stakeholders.

32. A baseline study will be carried out within the first year of the project implementation. Another survey will be carried out at mid-term to capture the mandatory/core indicators levels as demanded by the new IFAD Operational Results Management System (ORMS).

33. Consultants will be hired to develop an M&E software that will be linked to the financial management software for easy consolidation. Project staff and executing partners will be trained on the use of the software.

34. The Single Coordination Unit (SCU) and the Project Coordination Unit (PCU) will be responsible for the development of operational strategies and tools for Project implementation: The lead M&E Officer will be responsible for planning, monitoring, reporting, evaluation and assessment, learning, knowledge management and communication, as well as ensuring appropriateness and efficiency of implementation related to targeting. The lead M&E Officer will also be responsible for conducting special studies and knowledge products, communications and knowledge management facilitating the implementation of the up-scaling strategy, cross-component learning and organisation of policy seminars and workshops, stakeholder relations and other events. The FFS groups and networks, water user groups and other groups, and small producer groups will play a key role in the participatory monitoring of SLM services, GAP and other climate change resilience measures.

35. The lead M&E Officer supported by the Project Implementation Team, PPIU (Provincial Project Implementation Unit), PPCC (Province Project Coordination Committee.) will ensure that information is collected on a regular basis, providing factual information on changes and results achieved at village and landscape levels as well as documenting SLM and GAP benefits. Such testimonies are especially relevant for documenting project attribution to higher level impacts. Photo archives will be kept as part of qualitative information. To ensure an effective flow of information, the M&E Officer will develop simple tools for data collection, data entry, data processing and analysis. Standard forms and formats will be made available to ensure consistency in the way data is recorded. Tools are needed to systematically document progress at activities, outputs, outcomes, and impact level and will include:

- Standard formats for submission of financial returns on a monthly basis;
- Standard forms, based on the AWPB, to record the level of realisation and expenditure for each planned activity on a quarterly basis, and standard computer-based formats or templates to enter such data in a consistent manner, to facilitate consolidation;
- Standard forms to record results, in terms of activities completed and specific outputs produced, which will be the basis for physical progress summary information, and standard computer-based formats or templates.
- Standard forms and computer-based formats or templates for data entering, in particular registers of assets and contracts…etc.

36. By tracking progress, monitoring permits early identification of eventual implementation issues that needs to be addressed and facilitate decision making within the project context.

37. **Reporting.** Functional monitoring will be through monthly coordination meetings at the level of the SCU and also at the level of SREP implementation team at central and provincial level. Quarterly implementation reviews joint meeting of SCU, the SREP implementation team and PPIU to prepare data needed for progress reports. Results will be submitted in quarterly, half-yearly and annual reports to PCC, PISC and IFAD.

38. Progress reports present clear picture of the physical and financial achievements as compared to targets set in the AWPB, analysis of successful approaches and outputs, failures and constraints, and whether progress is being made towards achieving objectives. Progress related to outcomes and overall goal cannot be expected until a reasonable period after interventions and delivery of outputs has passed, however it is necessary to systematically collect data related to the outcomes and goal almost from the beginning. The first year Annual Progress Report will be based on key findings of baseline surveys that have been carried-out. From the second year onwards, the project needs to start analysing the degree of achievement of results. The reports should highlight and justify the implementation strategy and indicate challenges encountered needed to be addressed as part of the adaptive management of the project.

39. *Evaluation.* Evaluation by the SCU will ensure that implemented activities are leading to the desired impact. A particular focus will be the assessment of the effectiveness and efficiency of the project on food and nutrition security and resilience to climate change of rural households. Generally, there is the Mid-term Evaluation and the End of Project Evaluation. This is done using independent consultants

40. Baseline, mid-term and completion surveys. These surveys are undertaken at start, middle and end of the project implementation period and identify, the level of achievement of outcomes and impacts.

41. A Mid-Term Review (MTR) will be conducted halfway during implementation (beginning of fourth year) to assess the performance of the project. Recommendations for revisions to the activities and approach, the Logical framework targets will be made if necessary. In order to have pertinent information for the mid-term review, the project will need to conduct at about 3 months prior to the mid-term review and evaluation of its key outcome indicators to measure progress towards project impact and outputs.

42. Project Completion Report (PCR). At the end of the implementation period, a PCR will be compiled following IFAD principles to provide an overview of the accomplishments of SREP.

43. A number of ad hoc studies will be undertaken to support the planning and M&E processes including amongst others: a) a value chain mapping/ analysis, in the northern provinces; b) village profiling combined with the KAP survey - Knowledge, Attitude, Practice and Planning for nutrition; c) an appraisal of farmer cooperatives and associations (in all areas) and an assessment of the performance of Farmer Field Schools – in the south. Additionally, there are number of technical studies that could be conducted relating to farming systems analysis, livelihoods analysis and climate smart technologies that should be elaborated on during project start-up. Participatory discussions with project stakeholders should be conducted to solicit other priority studies to be conducted.

44. **Data management and beneficiary database**

45. **Beneficiary database.** A project M&E system will be set up comprising a beneficiary database; an inventory of internal and external documents (such as progress report, specialised studies and national policies); service provider (including district farmers associations) performance information; library of case stories and news clippings; a mapping database and a market information production database. Data will be collected at various levels under each component. The main unit of aggregation will be the group level, supplemented by individual level tracking of 1) a sample of a minimum 100 individuals from various groups; 2) mentored households; 3) any trainers trained (ToT) as well as a sample of traders and road beneficiaries.

46. **Data collection tools.** All data collection will be digital through the use of tablets. Standardised digital data collection tools and frameworks will be developed by the SCU for each of the components of activities, using freeware available for download on the internet. While data collection modalities will vary between contracted service providers, they will be expected to provide input in the digital formats requested; priority will be given to procurement processes to develop the data collection and management tools. Digital data collection is also a prerequisite for SREP to handle the amounts of data expected from beneficiary database which will be a key aspect of both monitoring and evaluation of performance and poverty targeting and movements.

47. **Learning and Knowledge management.** Knowledge Management (KM) will be a process by which value is generated from project intellectual and knowledge-based assets. It will include a detailed plan on how information will be obtained and disseminated project reports and reviews, development of knowledge products, policy workshops and the use of communication channels.

48. To share lessons learnt and promote up-scaling, the two Implementation Teams will be expected to use a range of different approaches, such as FFS, farmer field visits, radio, video, press releases and articles for local and international newspapers and the IFAD website. The project will benefit from and contribute to the GEF Food Security Programme knowledge network. With the support from IFAD, other relevant KM expertise could be mobilized to support the project in developing knowledge product. Tools, such as case studies and stakeholder interviews, will complement the M&E tools described above to deepen the understanding of factors contributing to adoption of improved agricultural and sustainable land management practices and success or failure to show impacts on ecosystems services and food security. One of the main purposes of knowledge creation and sharing will be to support policy making by building a comprehensive body of evidence, lessons learned, and good practices. The M&E tools will provide a cost-effective way of building strong cases and inform policy makers for further up-scaling.

49. **Communication strategy:** Stakeholder and service provider/implementer coordination and information sharing will be paramount in terms of activity coordination, knowledge sharing and participatory processes. The service provider database will be key tools for development of a targeted communication strategy, during the first years of implementation.

50. **Capacity Building:** As noted before, M&E capacity in Angola is limited and therefore capacity building will be essential. Efforts will be made through existing forums such as the East and Southern Africa Division Regional Implementation Workshops or undertaking a specific M&E training workshop for IFAD funded projects in Angola. The M&E Officer from the SCU, the SREP M&E officer and the assistants that will be engaged by SREP Norte and SREP Sulat provincial levels will benefit from country specific training.

52. **M&E Staffing:** M&E activities will be led by a lead Monitoring and Evaluation (M&E) / Learning Officer based in the SCU but responsible for SREP. The lead officer will support the SREP management team will work closely with the technical staff at all levels. The M&E officer will similarly support the Project Manager and the Team Leaders in national level coordination and policy dialogue. The two M&E officers will be supported by 2 more M&E officers for each of the regions and 3 M&E Assistants (1 in the southern provinces and 2 in the north). The M&E officers and assistants will support the technical departments to take responsibility for data collection, database development and maintenance. The primarily role of the officers will be to support the work of the technical staff, as well as work closely with implementing partners.

Annex 1: Reporting

- **Monthly reports** will be simple flash-reports indicating in bullet points areas of concern to enable adjustment of implementation. To be used by SCU management.
- **Quarterly reports** will be more detailed and will be the basis for self-assessment workshops and reporting on indicators. Budgetary reporting and progress in relation to the AWPB should be included. In addition, stakeholders should be encouraged to provide any observations on strengths and weaknesses of implementation. .
- **Semi-annual and annual reports** should follow the format of the quarterly report, but include an executive summary of no more than 2 pages, indicating key progress and actions to be taken. Tables including expenditures, compared to the AWPB, and reporting on indicators should be included (log-frame indicators as well as others, as identified in the monitoring plan). Targeting and inclusion of the rural poor in project implementation are crucial elements for reporting. The reports should include pictures and field reports. The reports will be submitted to IFAD and government.
- **Progress reports to IFAD supervision and implementation support missions** should include, as a minimum, i) the quantitative and qualitative progress achieved in implementing the project and achieving goals, ii) problems encountered during the period of reporting iii) the steps taken or proposed to remedy these problems, and iv) the proposed program of activities and expected progress during the reporting period. To be submitted to IFAD.

Table 1: Proposed timetable for reporting

Steps	Calendar	Responsible
Monthly		
Delivery of report to SCU	25th every month	Implementing partners
Consolidation of reports from partner service providers	5th of next month	Technical staff
Production of report and submission to management	10th of next month	M&E Officer
Quarterly		
Delivery of report to SCU	5th of next month	Implementing partners
Consolidation of reports from partners	10th of next month	Technical staff
Production of report and submission to management	15th of next month	M&E Officer
Semi-annually		
Delivery of report to SCU	31 January	Implementing partners
Consolidation of reports from partners	15 February	Technical staff
Production of report and submission to management	15 March	M&E Officer
Annual		
Delivery of report to SCU	10 July	Implementing partners
Consolidation of reports from partners	15 July	Technical staff
Production of report and submission to management	30 July	M&E Officer and Financial Controller
Presentation of report to IFAD and government	1 August	Project Manager

Annex 2: Individual baseline assessment questions

1. As indicated in the logical framework a simple baseline assessment index will be developed to assess, in particular, usage and relevance of project services. The questionnaire should be no more than 20 questions, and for the basis of a beneficiary database. A rating from 0-5 can be given by the beneficiaries. A suggested list of questions can be seen below. For groups, capacity assessments etc. are highlighted under the various objectives, but should also form part of the database.

Questions:

1) Has there been an extreme weather event on your farm?
2) What did you do when it happened?
3) What business/marketing skills do you have, and how do you use them?
4) Do you have any access to weather related information?
5) Or market prices?

2. Other information to be collected (through the above mentioned index or through baseline studies etc.) include the below. Preferably the data should be collected for beneficiary households, for purposes of project monitoring, and at project implementation level for impact monitoring. For assessment of roads impact, random selection along roads is suggested.

- Participation in community activities
- Access to land (and ownership of it)
- Access to labour
- Food security status of hh
- Knowledge of methods to increase production
- Degree of commercialisation (quantity (%) sold to market and assessment of mind-set)
- Gender, age, marital and disability status
- Degree of on-farm mechanisation
- Any energy and water saving technology at household level
- Geographical location of household
- Number of dependants of household

3. Some information should also be captured on people trained as training of trainers, community facilitators etc.

Annex 3: Group baseline assessment questions

1. The project database will capture all information from the technical components of group support, including rapid appraisals, capacity assessments etc. Specifically, the below will be captured.

- Existing or new group (existing can contain: FFS, revolving fund groups, youth groups, etc.)
- Type of training received:

    - FFS: climate change, junior, starting, or advanced
    - Social capital: leadership, governance and management, group dynamics, vision setting and sustainability, inclusive and gender mainstreaming (GALS), work plan development
    - Business Development Skills: Entrepreneurship, business mentoring, BDS

Annex 4: Resilience monitoring scorecard

Below is a draft resilience scorecard for beneficiary families, to be finalized at start up (higher total score means more resilience)

Indicator	Yes	No
1) Can you explain how climate variability and change have affected your production activities the last 10 years and how they will be affected in the future? (If the respondent gives at least 2 correct impacts from the past or the future in the agro-ecological zone where the family produce, the answer is 'yes')	1	0
2) Can you explain what options of adaptation practices and changes in your production system you or your village have and/or may implement to address these risks? (If the respondent mentions two good options the answer is 'yes')	1	0
3) In the last 3 years have you used weather forecast information to make decisions in the planning and implementation of your production activities?	1	0
4) Do you have a secured common or individual (given to a member living in your household) title to the land you are using for crop farming and livestock grazing?	1	0
5) Do you have sufficient access to water resources (stored in soils or via irrigation) for at least ¼ of your land used for crop production to cover the needs of the production during the dry season?	1	0
6a) *Only for crop farmers beneficiaries* - Have you introduced practice to improve fertility and water storage capacity of your soils? (If the answer is 'no' put '0' as score and jump to question 7, if the answer is 'yes' ask the following question and score based on the answer: - Have you seen or do you expect to see any improvement in the yields of your crops by using these practices?	1	0
6b) *Only for pastoralists or agro-pastoralist beneficiaries* Have you participated in any joint activities for improved rangeland management with all users of this rangeland? If the answer is 'no' put '0' as score and jump to question 7, if the answer is 'yes' ask the following question and score based on the answer: - Have you seen or do you expect to see improvements for your livestock because of this joint and improved management of the rangeland and do you think the group will be able to maintain this joint management?	1	0
7) Do you or a member of your family participate in a saving and credit scheme/arrangement through a farmer organisation (producer group, cooperative or association), a stand-alone saving and credit group or own saving account?	1	0
8) How many different products and non-agricultural activities gives an important income for your family? (if the answer is more than 3 products and activities the score is two points, if the answer is two products and activities the score should be 1 point if the answer is one or none the score should be 0 points)	2	0
9a) *Only for SREP Norte beneficiaries* Do you or a member of your family participate in a farmers organisation (producer group, association or cooperative) that has a financed business plan that has increased the income of the household?	1	0
9b) *Only for SREP Sur beneficiaries* Have you or a member of your family participated in the development of a Natural Resources Management Plan (NRMP) and in an interest group supporting the implementation of the Plan (catchment and irrigation management, rangeland management, ect.) and has this brought increased food security and income to your household?	1	0
Total maximum project attributable climate resilience score	10*	

*If an interviewee is agro-pastoralist he/she might score from both question 6a an 6b and the maximum possible score would then be 11. This should be taken into account in the analysis of the resilience results.

The M&E Officer in collaboration with other PIU staff will improve and adjust the scorecard and validate it with participation of beneficiary Villages. The proposed questions are formulated directed to households who are receiving project services, which is adequate for the rolling monitoring of the results of the project. But for the baseline study they should be revised to fit a baseline survey situation where both future potential beneficiary households and control group households are surveyed. In other words, it is important to consider what should be the resilience scorecard for the baseline, midterm and final survey and what would be the resilience scorecard to monitor the progress in household resilience of beneficiary families as the project is rolled out.

The scores assigned to each questions in the draft scorecard proposed above are simply 1 and 0 (except for question 8). It could be considered if all questions should have equal weight. Instead of only using binary 'yes' or 'no' answers scores it could also be considered to use:

a) Categorical scores to capture qualitative answers transformed into quantitative perception of resilience scores. For example, the question “How well would you and your family cope with a drought like the one that happened in 2015 if it happened within the current/next cropping season – how would you be affected?” may be scored as follows: ‘would not be affected’=3, ‘would be moderately affected’=2, and ‘would be seriously affected’=0.
b) Continuous variables using a range to convert into a resilience score for for example household income, yield/ha, time for recovering after a shock. Answers to for example the last question on time to recover after a shock are divided into ranges assigned a score: 1month=3; 2-3 months=2; 4-6months=1; and >6months=0.

Appendix 7: Financial management and disbursement arrangements

1. **Overall implementation arrangements.** The Leading Implementation Agency for SREP will be the Institute for Agricultural Development (IDA). The SREP Project Management Unit will be embedded in the Single Coordination Unit (SCU) that shall be established by IDA in Luanda to coordinate the implementation of all IFAD projects implemented through the Ministry of Agriculture: SADCP-C&H, ARP and now SREP. The SCU will also be responsible for the overall fiduciary management of the IFAD financed projects implemented through the Ministry of Agriculture in close collaboration with the fiduciary team of the World Bank project SADCP-WB, which is also implemented by IDA and has garnered several years of experience in financial management procedures of IFAD and WB financed projects. The overall structure of the SCU shall include a "core team" of experienced specialists made up of a SCU Coordinator, a Financial Controller,, a Senior Procurement Specialist, a Senior Planning, Monitoring and Evaluation Specialist. Furthermore, the SCU shall be established and initially financed by the IFAD project SADCP-C&H, which will guarantee that upon the start of implementation of SREP the necessary organizational structure shall already be in place. SCU organogram outlined in Annex 1.

2. **Financial Management Staffing**. SREP shall create a small financial management team embedded in the SCU composed of a Financial Management Officer (FMO), a Finance Specialist (FS) and an Accountant, responsible for the day-to-day accounting and financial management arrangements of SREP. The FMO will report to the Financial Controller of the SCU and will work in close coordination with the SREP Component Managers. Four additional accountants shall be hired for the four PPIUs. These accountants shall respond to the PPIU Area Manager and the FMO at SCU. The sub-offices to be established by IDA at provincial level will only handle small transactions to be managed by the sub-office Administrative Assistant. The selection of the FMO and the FS will be carried out by IDA, in accordance with Government practices for appointment of staff and with IFAD's No Objection. The selection of the SREP Accountant at SCU and the 4 Accountants of the PPIUs will be carried out by IDA, in accordance with Government practices for appointment of staff.

3. The selection criteria will be based on professional qualification with considerable relevance given to a consolidated experience in financial management of investment projects of International Financial Institutions. Knowledge of accounting software should also be taken into account in selecting the candidate. The selection of the project accountants will be based on a competitive process open to staff of the Ministry of Agriculture as well as external candidates.

4. As part of the overall set-up of the SCU, IDA shall hire an accounting and/or auditing firm with international reputation, and experienced in the project financial management arrangements of IFIs and other bilateral institutions, to provide on-the-job training to project financial management staff. It is envisioned that this support encompasses the first 2 years of project implementation.

5. In addition, a Financial Expert will be hired as International Technical Assistance (member of the Portfolio Implementation Facility-PIF team) to provide training on the job and mentoring to SCU finance team.

6. **Annual Work Plan and Budget (AWPB)**. The annual project budget will be prepared on the basis of guidelines and regulations reflecting government policy and in coordination with the preparation of Project's AWPB. The procedures for preparing the annual budget and project financing needs will be documented in the Project Implementation Manual (PIM). The budget will cover all project activities and will be prepared no later than two months prior to the end of each fiscal year. This proposal will be endorsed by IDA, and approved by the Programme Coordination Committee (PCC) and submitted to IFAD prior to implementation. The AWPB will describe all the activities to be implemented, description of expenditures by component, category, funding sources and timelines for implementation. It will also contain a procurement plan for the relevant implementation period. Timely preparation and approval of AWPB will be key to guarantee budgetary control. The budget information should be entered and available in the accounting system to allow for the timely recording of commitments, payments. Finally, IDA will send to IFAD the first AWPB for no-objection as a condition of first disbursement as per IFAD's General Conditions for Agricultural Financing.

7. **Accounting Policies and Procedures**. The Project will comply with the International Public Accounting Standards (IPSAS). The Financial Statements will be prepared in accordance with the IPSAS "cash basis" method of accounting. A Financial Management Procedures Manual (FMPM) will be adopted by the SCU and shall be incorporated as an annex of the Project Implementation Manual. The FMPM will be prepared by the SCU Finance Controller and FMO and will be based on internationally recognised 'best practices'. The FMPM will contain the accounting policies and procedures including a tailored chart of accounts, method of determination of the exchange rates and the financial management arrangements, evaluation methodologies for beneficiaries' and government in kind contributions. The FMPM should also lay down the precise internal control arrangements of the project. SREP will procure and install the accounting software PRIMAVERA, which is widely used by the IFAD financed projects in country. PRIMAVERA shall be installed and used for day-to-day accounting entries at the PIU and PPIU. Customization of the software will include the installation of the budget module.

8. The sub-offices to be established by IDA will only handle small transactions to be managed by a petty cash system in Excel. A similar system is already in use in the World Bank financed project SADCP-WB, and shall be adopted by SREP. The system will be managed by the sub-office Administrative Assistant, and the PPIU accountant within the same province shall regularly travel to the sub-office to reconcile the petty cash system, and record all transactions on PRIMAVERA at the PPIU level.

9. Due to the scarcity of highly trained accountants, it is envisioned that at the start of implementation the SCU Financial Controller and FMO provide significant capacity building to the SREP finance team on accounting policies and procedures. Furthermore, regular workshops on the use of accounting software shall be organized by the SCU to bring all accounting staff to a common level of minimum knowledge. Finally, the acquisition and installation of the software shall be a pre-condition for first disbursement.

10. **Financial Reports**. The project's accounting system will generate the necessary financial information for the Project financial progress reports as well as the year-end Financial Statements that will identify sources of financing, expenses by component and category against the project's AWPB and the cumulative expenditures to date. Available resources will be applied exclusively for the achievement of project objectives supported by complete supporting documentation and presented to IFAD in hard copy until the IFAD Client Portal has become operational. The format and content of these reports will be presented in the Letter to the Borrower and elaborated in the FMPM. The withdrawal application data should be an output from the accounting software.

11. **Disbursements Arrangements.** The disbursement methods available to IDA for the withdrawal of financing proceeds from the loan account shall be: advances, direct payments and reimbursement. The ceiling of the Designated Account, the limits of contracts subject to prior review and detail of supporting documentation required to accompany the application for disbursement will be defined in the Letter to the Borrower. Due to severe difficulties in the processing of payments to accounts abroad, and to the difficulty in the availability of USD resources for bank-to-bank transfers within Angola, pending the opening of an off-shore bank account, SREP shall need to use more frequently the direct payment for contractors and suppliers abroad, and within Angola. As such, the threshold for direct payments will be set at amount of USD 20,000. IDA shall liaise with Ministry of Finance and Bank of Angola on the opportunity of opening an offshore bank account for the processing of USD payments to accounts abroad. Once this account is opened, direct payment threshold will be revised.

12. **Flow of Funds IFAD**. IDA shall open a bank account in USD in Luanda to receive the proceeds of the financing (Designated Account). Mandatory joint authorized signatories of the account will be the SREP Project Director, the FMO or Financial Controller of the SCU and an authorized representative at MINFIN. Two operational accounts, one in AOA and one in USD, will be opened in a commercial bank in Luanda. This second USD account is needed in order to limit the number of operations in the Designated Account in each fiscal year. Authorized signatories on these accounts will include the Project Director and the FMO or Financial Controller SCU. The local USD account shall be closed when the USD off-shore account becomes operational. Another bank account in AOA shall be opened to receive Government of Angola counterpart funds. Four bank accounts in AOA (one per province) shall be open to manage expenditures at local level. The Area Coordinator will have signatory powers with the local accountant

managing all the disbursement, accounting and reporting requirements. Detailed procedures shall be outlined in the FMPM.

13. As it is envisioned that SREP will create 4 Provincial Programme Implementation Units (PPIU), the project will open provincial operational accounts in the provinces of Zaire, Uige, Benguela and Namibe. These accounts will be used only for small purchases to support the PPIU, as most of the payments will be centralized in Luanda. Mandatory signatories of these accounts shall include the PPIU Coordinator.

14. **Co-financier financial arrangements**: While each financer will have its own Financing Agreement (FA) with Angola with regards to supervision and implementation support, it was agreed that IFAD would lead and act as administrator with regards to the AFD loan. For this service, IFAD will be paid an annual fee. Similar arrangements have been entered between AFD and WB in the implementation of the Agricultural Commercialization Project (ACP).

15. Co-financing agreements between IFAD, AFD, and BADEA will be prepared setting out the implementation modalities in relation to procurement, disbursement, reviews and provision of prior "no objection", reviews of withdrawal applications (WAs), financial management and due diligence and reporting. BADEA will administer and manage its own co-financing.

16. IFAD will be entrusted with the day to day oversight of the project implementation while ensuring that AFD and BADEA are fully briefed and consulted prior to taking any major implementation decision.

17. **AFD Flow of funds:** The AFD flow of funds is described in Figure 9 below. AFD will follow IFAD's disbursement review and verification process, prior to executing payment.IFAD will undertake prior review of AFD WAs, and AFD will undertake final approval prior to disbursement of funds. Processes and procedures for AFD disbursement will be included in the PIM. The option of holding an offshore dollar account for the disbursement of payments in foreign currency will be explored. Until a solution is found SREP will make direct payment with a low threshold of US$ 20,000. The fund flow procedure will be described in the PIM.

18. **Government contribution.** In addition to the counterpart funds deposited in an account held by IDA for the payment of taxes by the project, Government will also contribute in the form of office space for the project in Luanda, as part of the establishment of the SCU. The contribution will be assessed by the project based on the prevailing market rate for a comparable office area in Luanda. The rate may be evaluated by independent real estate agents operating in the city, and should be reviewed annually. As it is envisioned that Government will also contribute in the form of logistics and personnel, this contribution shall be evaluated pro-rata. Furthermore, and in order to better reflect Government's contribution to the project in the project yearly financial statements, the project PIM shall detail all measures to account for Government's in-kind contribution, based on IFAD's in-kind domestic co-financing technical note. The amount so quantified shall be disclosed in the Notes to the Financial Statements rather than in the main body.

19. **Financial records.** SREP shall keep accurate records of all financial and procurement transactions. All original documents related to the project transactions should be safeguarded, and the project will continuously sensitize IDA on the need to safeguard all supporting documentation **related** to project activities for a period of 10 years following project closure. To mitigate the risk of loss of financial and procurement documentation, SREP should employ the use of electronic archiving already from inception. The project team should procure the services of a competent archiving company for the digitization of supporting documentation. This process should be done with a 12 month frequency at the beginning of the project to be scaled up to a quarterly frequency by the last 24 months of project implementation to guarantee that all project records are correctly digitally archived.

20. **Assessment, risk mitigation and internal controls**. The Public Expenditure and Financial Accountability (PEFA) assessment for Angola was carried out in 2016, and as at May 2018 is still due for publication. Angola ranks 167 out of 180 countries in the 2017 Transparency International Corruptions

Perception risk[67], a 3 point decrease in the scale from 2016 rating, signaling a worsening of perceived corruption risk. The African Development Bank carried out an assessment of the public financial management systems of Angola during the elaboration of its Country Strategy Paper 2017-2021[68] and concluded that the country has taken important steps to improve the fiscal framework and public financial management systems. However, the report notes some important areas of concern in budget execution and internal controls, as well as on significant variances between actuals and budgets, which may signal some issues in the absorption capacity to implement public investment projects. The overall risk of public financial management systems is ranked as substantial. As such, and based on this analysis the inherent financial management risk of the SREP is classified as high.

21. The creation of a new layer of project management (including fiduciary management) poses an additional risk, as the SCU will still need to develop its internal capacity, procedures and guidelines. To mitigate the internal control risk the following measures will be employed by IDA: 1) preparation of the FMPM upon approval of design report by Government; 2) purchase an accounting system and 3) hiring an internal auditor within six months after entry into Force.

22. Internal controls will be insured through effective segregation of functions, monthly reconciliation of accounts, and different levels of approvals required depending on amounts of expenses. Physical management of cash is discouraged, with the use of bank transfers and check books employed for the majority of expenditures. The PIU will detail the internal control arrangements, flow of funds, and roles, responsibilities and procedures in the FMPM. The FMPM should specially detail the minimum acceptable supporting documentation, and project approvals needed to process a payment, and the supporting documentation that must be presented for justification of expenditures such as travel, per-diem and fuel. It should also stipulate that advances are not to be treated as expenses until justified.

Key Financial Management element	Risk level	Mitigation measure
Staffing: scarcity of highly qualified Financial Management Specialists/accountants in-country	High	SREP (as part of SCU) to hire a qualified and experienced finance team for the SCU positions. SREP to request support from the Ministry of Finance to guarantee widest coverage of vacancy announcement and to receive a pool of potentially qualified professionals with financial management background. Furthermore, and as part of the support granted by the SCU, project financial management staff shall receive on-the-job training from a qualified and experienced accounting and auditing firm.
Budgeting: potential high variances between budget and actuals	High	SREP to prepare realistic AWPBs based on the experience of the ongoing projects SADCP-WB and SADCP-C&H. SREP team to acquire the PRIMAVERA budget module for continuous monitoring.
Budgeting: existence of a thriving parallel market for foreign currency with higher exchange rates than the official exchange rate	High	Funds transfers to operational account in AOA will need to be planned in advance to cover commitments due within a relatively short period of time to mitigate the risk of currency depreciation.

[67] https://www.transparency.org/news/feature/corruption_perceptions_index_2017#table
[68] https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Angola_-__Country_Strategy_Paper_2017-2021.pdf

Disbursement: difficulties in processing payments to accounts outside Angola from local commercial banks. Near impossibility of bank transfers in USD between different banks	High	IFAD to lower the threshold for direct payment to USD 20,000
Internal control environment: as part of the newly established SCU, the SREP FM unit could face difficulties in establishing an effective internal control environment	High	IDA to quickly establish operational manuals for the SCU, which shall be incorporated into the SREP PIM. Staffing of the SCU should also proceed the staffing of SREP to guarantee proper segregation of duties.

23. **Internal Audit**. The SCU will contract the services of an internal audit company through competitive bidding. This internal audit will then provide their services to all ongoing IFAD projects implemented through IDA. The internal auditor should be hired soon as possible following project effectiveness. The internal auditor should have relevant work experience with projects funded by International Financial Institutions. As the level of perceived risk of the project is high, the project should be internally audited at least twice per project year. The internal auditor should report to the Project Steering Committee and the contract administration should be facilitated by the Project Coordinator.

24. **External Audit**. Project financial statements will be audited by independent, private audit firms, satisfactory to IFAD, in accordance with International Standards of Auditing (ISA). The selection of the auditor should be on an open competitive process, and an important selection criteria should be experience in **auditing** projects of IFIs operating in Angola. The auditor's report will be submitted to IFAD no later than six months after the closing of the borrower's fiscal year. The external audit will be conducted in accordance with Terms of Reference (ToR) acceptable to IFAD. Draft ToR can be found in Attachment 2. Auditors will be required to issue an opinion on project financial statements and the audited financial statements will be publicly disclosed as per IFAD's Handbook for Financial Reporting and Auditing of IFAD-financed projects.

Figure 8: Flow of funds IFAD

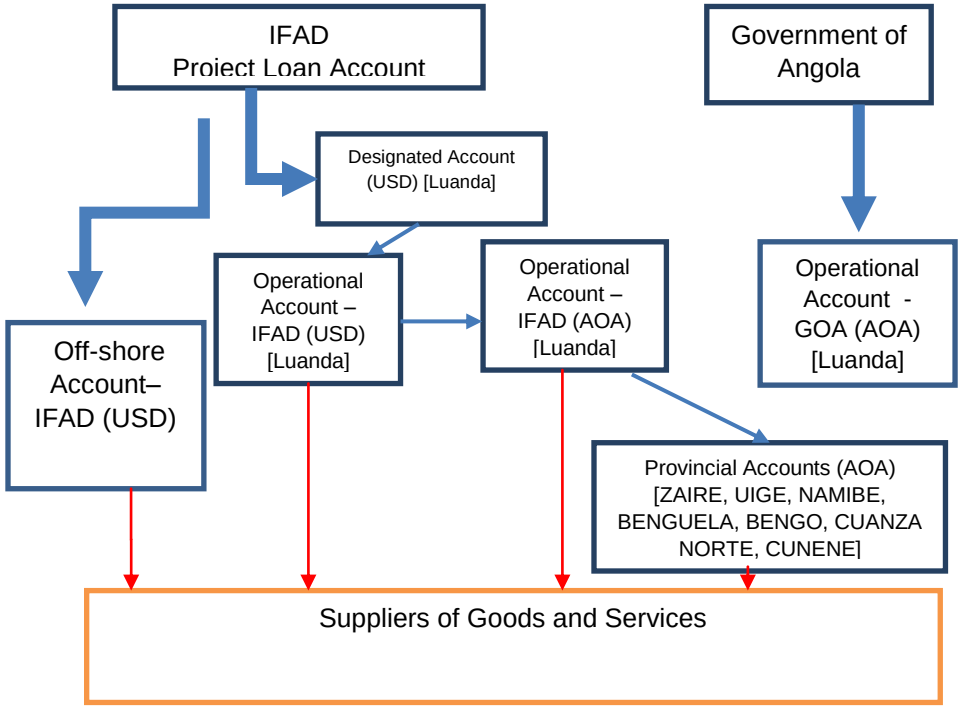
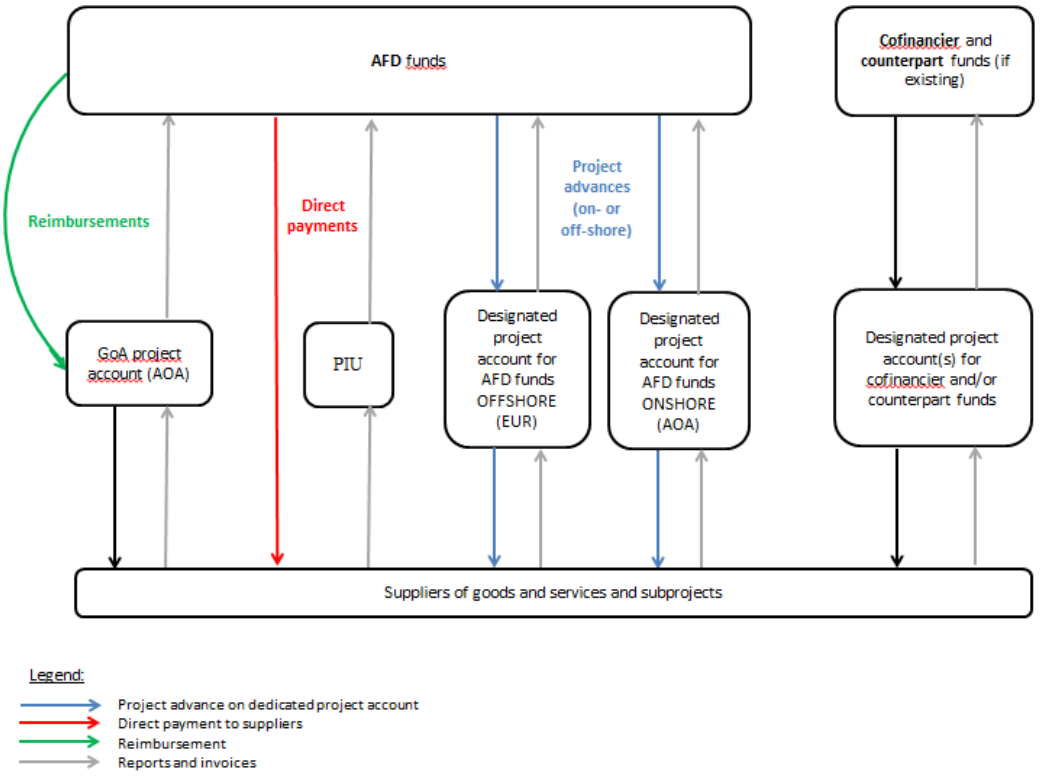


Figure 9. Flow of Funds AFD



Attachment 1: draft audit TORs

Guidelines for the Preparation of the Terms of Reference for the PROJECT AUDITOR

DRAFT TORS: EXTERNAL AUDITOR

1. Background

- The International Fund for Agricultural Development (IFAD) is aiding the borrower/recipient in the form of loan(s) [and/or grant(s)].
- A financing [and /or grant] agreement or agreements has/have been signed between IFAD and the borrower/[recipient]; refer to appendix 1.
- [Insert for private auditor]: IFAD requires the borrower/recipient to appoint an independent auditor to audit the accounts related to the project, in accordance with the IFAD Handbook on Financial Reporting and Auditing.
- The reporting entity is the Institute for Agricultural Development (IDA).
- The entity prepares its financial statements in accordance with [applicable accounting standard]. The auditor conducts its audit in terms of [applicable auditing standard].
- [Insert any other information that may be relevant to the auditor].

2. Objective

The objective of this audit is to enable the auditor to express an opinion on whether the financial statements (including additional disclosures as outlined in section 5) present fairly, in all material respects, the financial position of the reporting entity as at [insert year-end date], and/or the results of its operations and its cash flows for the years then ended, in conformity with the [applicable accounting standards].

3. Responsibilities of the borrower/[recipient]

i. General

a. Provide financial statements for the activities financed by the loan/[grant] that are reconcilable to its records and accounts.

b. Provide the auditor with access to all legal documents and correspondence with consultants, contractors and other persons or firms engaged by the project, and any other information associated with the project and deemed necessary by the auditor.

c. Ensure that the accounting policies are consistently applied and disclosed.

d. Ensure that appropriate internal controls are implemented to prevent misstatements and susceptibility to fraud. Ensure compliance with all relevant laws and regulations that pertain to the entity, as well as with the financing agreement between the borrower/[recipient] and IFAD.

e. Provide the financial statements to the auditor within a reasonable time and be available for any queries that the auditor may have.

ii. Financial statements

The borrower/[recipient] shall:

a. Prepare financial statements covering the reporting period [date] to [date], in accordance with [IPSAS/IPSAS "Financial Reporting under the Cash Basis of Accounting" standards]. In addition, the following specific disclosures will be included in the financial statements:

   i. Withdrawal application statement– appendix 1 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

   ii. Sources and uses of funds statement – appendix 2 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

   iii. Designated Account statement and reconciliation – appendix 3 to the IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects;

4. Responsibilities of the auditor

i. Auditing standards

a. The auditor is responsible for the formulation of an opinion on the financial statements in accordance with [ISA/ISSAI/national auditing standards];

ii. General principles

By agreeing to these terms, the auditor confirms that:

a. The firm is independent from the project, its staff and activities, in accordance with international best practices.

b. The firm is not providing consultancy services to the project or preparing its project financial statements (nor has it done so in the previous two years).

c. The auditor is suitably qualified and a member of a professional body affiliated with the International Federation of Accountants.

d. [The office of [public auditor] is a member of the International Organization of Supreme Audit Institutions (INTOSAI).]

e. The auditor is able to conduct the audit in line with auditing standards acceptable to IFAD, pursuant to paragraph 4.1.

f. The firm can assign an audit team to the audit that has the necessary competence and skills.

g. The firm has a proven track record in conducting audits of a similar nature and complexity.

iii. Management letter

The management letter is an integral part of the audit package that documents accounting and internal control issues identified by the auditors. The management letter should:

a. Outline the auditor's recommendations to improve identified accounting and internal control issues;

b. Include the responses of project management to the identified control issues, and its proposal to address the issues identified within a specific time period.

c. Where applicable, follow up on the issues identified in the previous year's management letter.

iv. Reporting

The Auditor is required to deliver an audit package that includes:

a. The audited financial statements, including additional disclosures as outlined in paragraph 3.2;

b. An audit opinion on the financial statements, within the scope as outlined in paragraph 5;

c. [A report on factual findings, within the scope of agreed-upon procedures as outlined in paragraph 6.] Any ineligible expenditure identified should be clearly mentioned.

d. A management letter, including the information outlined in paragraph 4.3;

The audit report should provide sufficient detail as to the nature and extent of the procedures performed by the auditor. The auditor is required to provide the audit package by no later than [insert date]. Reports are to be delivered in English.

5. Scope of the financial audit

In performing the audit, at a minimum the auditor shall:

i. Obtain an understanding of the internal controls related to the financial reporting process, to identify and assess any weakness in internal control that might result in misstatements, whether due to fraud or to error;

ii. Design and conduct audit procedures in response to any weaknesses identified in the internal controls relating to the financial reporting process, to obtain audit evidence that the financial statements are fairly presented and free from material misstatements, in accordance with the applicable accounting framework;

iii. Verify whether expenditure that was incurred in the name of the project is in line with the terms of the financing agreement(s) (appendix xx) and incurred for the purposes intended in this agreement. Both IFAD and third party funding should be taken into consideration;

iv. Verify that the inventory and fixed assets held by the entity exist, are complete, are properly accounted and are used for the project purposes;

v. Note any weaknesses in the internal control environment and in the financial reporting process, and communicate those in the management letter.

vi. [List others].

6. Scope of the agreed-upon procedures

The auditor is required to perform the following specific procedures and report on factual findings as required in paragraph 4.4.

i. Withdrawal application statement

The auditor is requested to obtain the individual withdrawal applications (WAs) submitted to IFAD, as summarized in the withdrawal application statement, and develop test procedures to:

a. Determine whether the Designated Account currency equivalent was determined using the historical exchange rate of transfers to the operating account;

b. Determine whether goods and services have been purchased through the SOE mechanism in line with the stipulated SOE threshold;

c. Determine whether the expenditures claimed through SOE procedures were properly and appropriately authorized, classified and supported by audit documentation;

d. Identify any ineligible expenditure;

e. [List additional procedures, if applicable].

ii. Designated account statement and reconciliation

The auditor is requested to review the activities of the designated account(s) associated with the project, including the initial advance, replenishments, interest that may accrue on the outstanding balances, and the year-end balances. The auditor is requested develop test procedures to:

a. Check the accuracy of the Designated Account reconciliation(s);

b. Confirm that the Designated Account(s) have been maintained in accordance with the provisions of the financing agreement;

c. [List additional procedures if applicable].

iii. Certified Statement of Expenditure [applicable to grants]

The auditor is requested to obtain the certified Statement of Expenditure as submitted to IFAD, and develop test procedures to:

a. Determine if expenditures incurred are related to the project description in according with the grant agreement;

b. Determine whether goods and services have been purchased through the SOE mechanism in line with the stipulated SOE threshold;

c. Determine whether the expenditures claimed through SOE procedures were properly and appropriately authorized, classified and supported by audit documentation;

d. Identify any ineligible expenditure;

e. [List additional procedures if applicable].

iv. Expenditure transaction list [Applicable to grants]

The auditor is requested to obtain the expenditure transaction list submitted to IFAD and develop test procedures to:

a. Determine if the expenditure incurred is related to the project description in accordance with the grant agreement;

b. [List additional procedures if applicable].

7. Public disclosure

IFAD promotes public disclosure of project financial information to enhance the level of transparency and accountability. IFAD will disclose project audit reports, as appropriate, in line with the Fund's disclosure policy. Management Letters issued by auditors are not subject to public disclosure by IFAD. In agreeing to the terms of reference, the auditor explicitly acknowledges IFAD's right to publicly disclose audit reports (audited financial statements and audit opinion) and will issue reports without a limitation of use clause.

To facilitate the public disclosure process, the auditor is requested to submit two separate files as follows:

i. Audited financial statements and audit opinion; and

ii. Management Letter.

_____

Signed by:

Authorized representative of the auditor

Date:

8. Appendices

Appendix 1: Financing/grant agreement(s)

Appendix 2: Letter to the Borrower

Appendix 3: IFAD Handbook on Financial Reporting and Auditing of IFAD-financed Projects

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Attachment 2: draft TORs for Financial Management Officer

Background and General Information

The total costs of the Project are estimated in about USD 150million, to be financed by an IFAD loan (... million USD) and the Government of Angola (… million USD). The total recurrent costs are estimated to be about USD ... million USD. The detailed costs for each of these items are presented in Appendix ... (Project Costs and Financing).

Implementation Arrangements

As described in detail in Appendix … of the Project Design Report.

Background Qualifications and Experience of the Financial Manager

High degree in economics or finance administration; at least 5 years in financial management and accounting in internationally financed programmes; good skills in using computer financial management and accountancy software; fluency in spoken and written Portuguese and English; experience in implementing IFAD or World bank funded projects will be an advantage.

Scope of Technical Services

Under the direct supervision of the Project Manager, the Financial Manager will be responsible for the financial management and administration in relation to project implementation. Specific responsibilities include but are not limited to:

- Implementing the Project Financial system and tools;
- Conducting the financial management, accounting of the project;
- Managing project funds.
- Preparing and monitor annual budgets in the framework of the annual planning process;
- Ensuring all project accounts, disbursement and replenishment procedures are managed with respect to disbursement and replenishment in accordance with the procedures stipulated by the Financing Agreement;
- Preparing regular financial progress reports as required by the government and IFAD;
- Preparing regular withdrawal applications for the replenishment of the project's Designated Account.
- Preparing of annual and final Project Financial reports for external auditing and provide all required assistance to Project external auditors.
- Assisting the Project Manager in elaborating the Project Completion Reports, by providing update detailed project financial statements;
- Implement an electronic archive of financial documentation.
- Assisting the Project Manager in conducting Project Completion and Loan Closing activities in compliance with Loan conditions.

Attachment 3: Guidelines for Disbursement of Funds

The guidelines below give a high-level overview of BADEA's disbursement of funds procedures. Full details can be accessed in the link below:

https://badea.org/Portal/Document_Repository/151/1_gpl.pdf

1.1. Purpose

1.1.1. **For the borrower:** proceeds are delivered as quickly as possible, in order to avoid delays in project execution.

1.1.2. **For the lender:** to ensure that loans are used exclusively for the purpose for which they were made available.

1.2. Principles

1.2.1. Conformity with procurement guidelines.

1.2.2. Compliance with terms of contract.

1.2.3. Conformity with specified goods and services.

1.3. Conditions and Preliminary Procedures

1.3.1. The loan agreement must be signed.

1.3.2. All conditions pertaining to the effectiveness of the agreement are to be completed before disbursements are made.

1.3.3. The loan closing date must be valid before any disbursement can be made. If it expires before all the proceeds are disbursed the Borrower (Ministry of Finance) should apply for an extension.

1.3.4. That the persons who will sign disbursement applications have been properly authorized and BADEA is supplied with authenticated signatures, by using (Form 1), the authorization should be signed by the borrower's representatives designated in section VII-1 of the General loan agreement.

1.4. Methods of Disbursement

1.4.1. Reimbursement to the Borrower.

1.4.1.1. The supplier / contractor charges the borrower.

1.4.1.2. The borrower pays the supplier / contractor.

1.4.1.3. The borrower applies for BADEA reimbursement.

1.4.1.4. BADEA reimburses the borrower.

1.4.1.5. Documents required by BADEA for completion of reimbursement file:

a) Two copies of an Application for Reimbursement (Form 3) signed by an authorized signatory of the borrower.

b) Two copies for the summary statement (Form 5 for supplier) or (Form 6 for contractor).

c) Evidence of payment i.e. (formal receipt from the supplier, bank transfer or any evidence of payment satisfactory to BADEA).

d) The supplier's or contractor's invoices, which must be certified by the consultant when appropriate.

1.4.2. Direct payment to the contractor or consultant or suppliers.

1.4.2.1. The supplier or contractor will charge the borrower for the goods and services supplied

1.4.2.2. The borrower will pass on to BADEA the charges made by the supplier or the contractor with the "Application for Direct payment" (Form 4), signed by an authorized signatory of the borrower.

1.4.2.3. BADEA pays the supplier or the contractor directly upon receiving the disbursement application from the borrower.

1.4.2.4. Documents required by BADEA for completion of Direct payment file:

a) Two copies of an Application for Direct payment (Form 4) signed by an authorized signatory of the borrower.

b) Two copies for the summary statement (Form 5 for supplier or Form 6 for contractor).

c) The supplier's or contractor's invoices, which must be certified by the consultant.

1.4.3. Payment under Letter of Credit (Guarantee).

1.4.3.1. The supplier will request the borrower to open L/C.

1.4.3.2. The commercial Bank will open L/C on behalf of borrower.

1.4.3.3. The Bank will request BADEA for the guarantee payments under the L/C.

1.4.3.4. The Borrower will apply for "Qualified repayment guarantee" from BADEA by using (Form 9 and Form 11).

1.4.3.5. BADEA will send to the Bank two copies of the letter of "The Qualified Repayment Guarantee" (Form 12), attached with the proposed L/C.

1.4.4. Payment under Letter of Credit (Repayment)

1.4.4.1. The bank will be required to sign the appropriate section of Form 12 and send the original back to BADEA together with a list of authorized signatories of the bank.

1.4.4.2. The commercial bank will make the payments to the supplier under the L/C.

1.4.4.3. The bank requests BADEA for repayments of the L/C using Form 14.

1.4.4.4. BADEA effects payment directly to the Bank.

1.4.5. Payment under Letter of Credit (Amendment of the L/C)

1.4.5.1. The bank should send two copies of the proposed amendments to the borrower.

1.4.5.2. The borrower will send a request to BADEA for a Letter of Credit Amendment by using Form 15, with two copies of the amended L/C attached.

1.4.5.3. BADEA will endorse one copy of the amendments and return it directly to the bank and inform the borrower.

1.5. Notification of Payment

1.5.1. Upon effecting of payment under any of the three methods, and receipt of confirmation of debit notice from BADEA's Bank, the Borrower will be notified by sending a Debit Advice by the mail and a detailed fax concerning the transaction to the Borrower.

1.6. Currency

1.6.1. BADEA commitment is in US Dollars. However, payments can be made in US Dollars or in any other currency, upon request.

Appendix 8: Procurement

1. Procurement of goods, works and services financed by the IFAD loan and other co-financiers' loan/grant will be undertaken in accordance with IFAD Procurement Guidelines and IFAD "Policy on preventing fraud and corruption in activities and operations". All procurement will be executed only against approved Annual Work Plan and Budget (AWPB) which align with the procurement plans, specifying items to be procured under each component, agency responsible for such procurement, procurement method to be used (as defined in IFAD Procurement Handbook and Guidelines) sequencing/timing and total cost involved. All larger procurement are expected to be NCB contracts, except international competitive bidding (ICB) for contracts above an agreed threshold. All procurement financed by IFAD will be exempt from duties and taxes. IFAD prior review thresholds will be established at US$75,000 for goods and works and US$50,000 for consultancy services. These will be described in the Project Implementation Manual (PIM) with additional requirements of IFAD's Prior-Review procedures specified in the Letter to the Borrower (LTB).

2. Procurement planning will be very crucial and will follow the appropriate templates in the IFAD Procurement Handbook and Guidelines as already adapted for other on-going IFAD-supported projects in the country. However, as provided in IFAD's Project Procurement Guidelines, SREP will use World Bank's Guidelines and standard bidding documents for ICB. The project will ensure that timelines included in the approved procurement plan are closely monitored during implementation to minimize delays.

3. A procurement assessment has been undertaken based on the current operation of IFAD funded projects. The design draws lessons from the on-going projects in the country. Robust implementation arrangements will be put in place to ensure effective project execution. The project will be embedded in the Ministry of Agriculture & Forestry structure.

4. The African Development Bank carried out an assessment of the country's procurement systems of Angola during the elaboration of its Country Strategy Paper 2017-2021[69] and concluded that the country has taken important steps to improve the fiscal framework and the country's procurement systems. However, some weaknesses were identified in the internal and external controls, as follows: (i) *Serviço Nacional da Contratação Pública* (SNCP)/National Public Procurement Service (NPPS) is involved in transactions, (ii) the Public Financial Management internal control entity (General Inspectorate of Finance – IGF) lacks capacity in procurement and its reviews are usually ex-post and not systematic, and (iii) there is no dedicated and independent procurement entity in charge of quality review of procurement processing. Regarding the complaints mechanism, there is no independent administrative body for review of complaints, which may impact the confidence of the private sector in the system. The procurement law calls for ethical behaviour for public servants intervening in procurement procedures and for the bidders, including sanctions for non-compliance.

5. A Country Strategy and Programme Evaluation (CSPE) was undertaken by IFAD's Independent Office of Evaluation (OIE) in November 2017. IOE has shared the CSPE draft report with the Programme Management Department (PMD) and the Government of the Republic of Angola. The report is informative, providing in-depth lessons learnt in implementing projects and conducting policy dialogue in country. Many lessons have been detailed from the engagement and projects, which are being considered during design of new investments and project implementation. The CSPE gave an overall rating of moderately satisfactory to the project portfolio achievement. As it relates to procurement, the CSPE highlighted that AFAP, another IFAD-funded project in Angola, faced severe procurement-related issues, which were addressed by a supervision mission carried out in November 2017. The CSPE goes on to specify that, although initially only few international procurement activities had been planned, the high cost and non-availability of several goods and services on the domestic market required more international procurement actions, also for relatively small amounts. However, the 2016/2017 economic and financial crisis in the country triggered severe restrictions in the availability of foreign currency. As a consequence, the evaluation noted that AFAP management has been facing difficulties in the transfer of funds to accounts outside of Angola to pay for internationally

[69] https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Angola_-Country_Strategy_Paper_2017-2021.pdf

procured goods and services. This complex situation could seriously impact the effectiveness and efficiency of procurement activities under SREP and it is therefore recommended for the Project to open a second designated account in US dollars in an offshore bank to make payments to international consultants and suppliers.

6. The specific principles governing project procurement will be as follows:

a. Procurement will be carried out in accordance with the Financing Agreement, the Letter to the Borrower and the Project Implementation Manual and any subsequent changes reflected in IFAD‘s mission reports (e.g. supervision reports, mid-term reviews, etc.); All procurement shall be carried out in accordance with IFAD's Procurement Handbook and Project Procurement Guidelines. The overall procurement responsibility will rest with the MINAGRI/IDA.

b. Procurement shall be conducted within the project implementation period (from the date of effectiveness to the date of completion). Procurement cannot be undertaken between the date of completion and the closing date;

c. Procurement must not exceed the availability of funds duly allocated by the financial agreement;

d. Procurement Plan must be consistent with the approved Annual Work Plan and Budget (AWBP); and

e. The principle of value for money must be sought: Best value does not necessarily mean the lowest initial price option, but rather represents the best return on investments, taking into consideration the unique and specific circumstances of each procurement activity; the balance of time, cost and quality required; and the successful overall outcome of the contract in meeting its original objectives.

7. The following project activities are subject to IFAD's procurement procedures:

a. **Goods.** This activity will include procurement of vehicles and motorcycles, agricultural implements, IT equipment, material and furniture & fixture. Goods will also include any activities included in the selected subproject proposals.

b. **Works.** This activity will include rehabilitation of irrigation systems, rehabilitation of roads, construction of bridges/drifts, repair/renovation of technical staff housing and office complexes, repair/rehabilitation of warehouses and market infrastructure, and rehabilitation and/or renovation of critical agricultural extension facilities at local level. Specific activities for irrigation are (i) upgrading of the area around the intake and the main canal; (ii) rehabilitation of collecting structures for the accumulation of water to be distributed and/or rehabilitation of damaged embankments; (iii) installation of control structures like water gates; (iv) upgrading (digging) of the main canals and, where necessary, lining critical stretches of the distribution system; and (v) use of local plants/grass to control canal erosion. Works will also include any activities included in the selected subproject proposals.

c. **Consultancies.** This activity will include (i) recruitment of service providers for capacity building of community associations, agricultural statistics, market information systems, agricultural policy analysis, irrigation-related services, and agricultural research that will include improving soil diagnostics services; multiplication of seeds and planting materials; strengthening national research and extension systems; and scaling up testing and demonstration of improved technologies at the international and regional levels.

8. **Particular methods of procurement for Goods, Works and Non-consulting Services**

9. **General.** Procurement of goods, works and services financed by IFAD shall be carried out in accordance with the provisions of the Borrower's procurement regulations, to the extent such are consistent with the IFAD Procurement Guidelines. Each Procurement Plan shall identify procedures which must be implemented by the Borrower in order to ensure consistency with the IFAD Procurement Guidelines.

10. Concerning Angolan procurement regulations, Law No. 20/10 ("*Lei dos ContratosPúblicos*") has recently been amended by Law No. 9/16. An assessment of the changes introduced by Law No. 9/16 will be carried out in order to verify compliance with IFAD Procurement Guidelines. Any deviations will be included in the Financing Agreement and in the Letter to the Borrower.

11. **IFAD Review of Procurement Decisions:** IFAD will undertake to review the provisions for the procurement of good, works and services to ensure that the procurement processes are carried out in conformity with the Guidelines and Procedures. The following procurement decisions shall be subject to prior review by the Fund for the award of any contract for goods, works, consultancy and services under SREP:

i. Procurement of goods, materials and works
   a. Prequalification documents and shortlist when prequalification is undertaken;
   b. Bid documents for goods, materials and works;
   c. Evaluation report and recommendation for award; and
   d. Contract and amendments.

ii. Procurement of consultancy services
   a. Expressions of interest;
   b. Request for proposal;
   c. Technical evaluation report;
   d. Combined (technical and financial) evaluation report and the recommendation for award; and
   e. Contract and amendments.

12. **Prior Review Thresholds**: Procurement decisions will be subject to prior review as stated in Table 1. The procurement plan shall set forth those contracts that shall be subject to prior review by the IFAD. All other contracts shall be subject to post review by IFAD. IFAD may, at its own discretion, require that a sample of contracts below the threshold be subject to prior review, at any time or when the procurement plan is updated.

Table 8: Threshold for Procurement of Goods, Works and Services

Thresholds for Procurement and Review Methods Expenditure Category	Contract Value Threshold (US$)	Procurement / Selection Method	Contracts Subject to Prior Review
Works	≥ 500,000	ICB	Prior Review
	≥ 75,000 < 500,000	NCB	Prior Review
	<75,000	Shopping	(Post review)
	All values	Direct Contracting	Prior Review
Goods	≥ 200,000	ICB	Prior Review
	≥ 75,000 < 200,000	NCB	Prior Review
	<75,000	Shopping	(Post review)
	All values	Direct Contracting	Prior Review
Consulting Services – Firms	≥ 200,000	QCBS/QBS	Prior Review
	<100,000	CQS/Other (QCBS/QBS/ FBS/LCS)	Prior Review
	All values	SSS	Prior Review
Consulting Services - Individuals (IC)	≥ 50,000	IC- International - QCBS	Prior Review
	< 50,000	IC –National - QCBS	Prior Review
	All values	IC – SSS	Prior Review

ICB.	International Competitive Bidding	NCB.	National Competitive Bidding
QCBS.	Quality and Cost Based Selection	CQS.	Selection Based on Consultants' Qualification
FBS.	Fixed Budget Selection	LCS.	Least Cost Selection
SSS.	Single Source Selection	QBS	Quality Based Selection
IC.	Individual Consultant	DC.	Direct Contracting

13. **Co-financing Procurement Arrangements**: AFD will follow IFAD procurement procedures. The review of withdrawal applications will be initially conducted by IFAD with disbursement conducted by AFD directly. AFD will entrust procurement oversight and "no objections" to IFAD as will be detailed in the "Co-financing Agreement". BADEA will use their own procurement and disbursement procedures as described in Attachments 1 and 2. BADEA will ensure that the SREP PIU will be fully trained in the BADEA procedures which will be included in the SREP PIM.

1. PROCUREMENT PLAN

As soon as possible after project commencement, the Project Coordinator shall submit to IFAD the draft 18-months annual work plan and budget and procurement plan for review and No Objection. The procurement plan shall be prepared annually and submitted to IFAD for review and expression of No Objection 60 days before the beginning of each subsequent project year. When preparing the procurement plan, an accurate and realistic planning and prioritization of needs is an essential prerequisite to effective procurement and a key tool for monitoring project implementation. The procurement plan will be updated annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. Items procured outside the procurement plan and the related AWPB will be declared mis-procurement and the related expenditure will be ineligible.

All procurements should be undertaken only during the project implementation period. The procurement plan for each year will be consistent with the project's AWPB and its target date of implementation including list of procurement of works, goods, and services to be procured under the project yearly with estimated cost and method of procurement detailed in appropriate formats for each budget year. The procurement plan details include:

a) A brief description of each procurement activity to be undertaken during that project implementation period;
b) The estimated value of each activity in US$ equivalent to Angolan Kwanza;
c) The method of procurement to be adopted for each activity;
d) Works procurement packages with methods and time schedule
e) Goods procurement packages with methods and time schedule
f) Consultancy assignments with selection methods and time schedule
g) The method of review of each activity (Post or Prior); and
h) Timelines showing milestones when the key stages of the procurement cycle will be achieved.

I. General description

a. Project Name: Smallholder Resilience Enhancement Project (SREP)
b. Country: Angola
c. Borrower: Republic of Angola
d. Loan No. TBD
e. Project Implementing Agency: MINAGRI/IDA.
f. Implementing Partners: MINAGRI/IDA
g. IFAD's Approval Date of the Procurement Plan: TBD
h. Date of General Procurement Notice: TBD
i. Period Covered by this Procurement Plan: TBD

2. PROCUREMENT UNIT

SREP procurement activities shall be coordinated by a Procurement Specialist (PS) who will be working under the direct supervision of the Project Coordinator in the Single Coordination Unit (SCU) based in Luanda and will be responsible for undertaking procurement activities within the defined thresholds and prepare procurement documents for processes. The PS will help in running the unit's responsibilities. The PS should have the relevant qualification, experience and sound knowledge and understanding of IFAD Procurement Handbook and Guidelines and knowledge of other donors' procurement procedures applying to internationally financed projects. The PS will facilitate procurement for the SREP with following guidelines to be specified in the Project Implementation Manual (PIM), including procurement procedures for goods, works and services, internal control, reconciliation and dispute resolution, risk management; post procurement, audit and monitoring, etc.

3. ASSESSMENT OF THE FIDUCIARY RISK IN PROCUREMENT

The risk mitigation measures for the project include enhancement of the SREP's procurement capacity by: (a) hiring experienced Procurement Specialist at the PIU/SCU, whose main duty will be to hire service providers/consultants and provide support to the procurement team; (b) conduct procurement trainings for the personnel at federal and provincial levels and (c) preparation of the procurement implementation manual. Overall, procurement risk is high. The table below summarizes the main risk factors as well as the mitigation measures proposed:

Risks	Possible Consequences	Mitigation Measures
• Procurement risk	• Delays in procurement • Inadequate and incomplete Terms of References (ToRs), technical specifications and Bill of Quantities (BoQ)	• Hire qualified and proficient Procurement Specialists/Experts • Staff involved in the implementation of procurement activities should be provided procurement clinics on a regular basis;

Risks	Possible Consequences	Mitigation Measures
• Procurement Planning	• Inadequate procurement planning and monitoring and follow-up of procurement activities	• Train procurement staff in the preparation and updating and monitoring of procurement plans at all levels • Follow up of procurement activities at all levels
• Delay in Project start-up	• Possibly lengthy recruitment and implementation and disbursement delays	• Timely recruitment of SCU/PIU/PPIUs staff • Assistance from IFAD and other on-going projects in implementing start-up activities
• Contract Management	• Lack of experience in contract monitoring and administration	• Provide training to staff in contract monitoring and management • Continuous capacity building and strict follow-up and supervision
• Capacity Building	• Weak capacity in procurement	• Prepare and implement a comprehensive capacity building plan • Continues capacity building of IDA and SREP

Draft: Terms of Reference for Procurement Specialist

Purpose

The procurement reports directly to the Project Coordinator and is responsible for managing procurement processes and contract administration aspects. As head of the procurement unit, the incumbent will be tasked to ensure compliance with National Procurement Law and its regulations and ensure due diligence to comply with IFAD Procurement Guidelines and handbook.

Background and General Information

The total costs of the Project are estimated in about USD ... million, to be financed by an IFAD loan (….. million USD) and the Government of Angola (… million USD). The total recurrent costs are estimated to be about USD ... million USD. The detailed costs for each of these items are presented in Appendix ... (Project Costs and Financing).

Implementation Arrangements

As described in detail in Appendix … of the Project Design Report.

Procurement Specialist's Scope of Work

i. Installation of appropriate procurement systems and procedures for effective planning and monitoring of procurements under the project;
ii. Oversee preparation and consolidation of inputs to the annual procurement plan;
iii. Ensure all prior review requirements such as obtaining of the No Objections from IFAD are complied with in a timely manner;
iv. Ensure that all the due tendering processes are adhered to: sufficient publications, strict adherence to deadlines, transparency in communications with bidders, publication of bid results, etc.;
v. Establish a simplified procurement tracking system for monitoring of the project procurement activities and train staff to track procurement, to analyze recurrent weakness and strengths and to develop and implement mitigation measures;
vi. Provide direct support and hands-on technical assistance to the procurement management staff at PPIUs in order to enhance efficiency and effectiveness of handling procurement;
vii. Train staff to prepare and update the Project's Annual Procurement Plan (including procurement method, types/kinds, quantity, value, delivery requirements, sources, etc.);
viii. Coordinate the preparation of Bidding Documents and RFPs and issue the documents to the respective bidders and consultants;
ix. Assist establishing a performance monitoring database for all suppliers and consultants, and ensure timely updates of the system;
x. Assist in handling project procurement related complaints, including logging and recording, notifying the IFAD, and preparing response to the complaints, including in the preparation of qualitative justifications for settlement of disputes with consultants and suppliers;
xi. Ensure acceptable record keeping in procurement with at least a complete procurement file for each procurement from start to contract finalization. Maintain all procurement records in a form appropriate for regular auditing and spot checks by supervision missions;
xii. Prepare bi-annually progress reports with implementation of the procurement plan, and regularly inform the PC of problems and make proposals to overcome bottlenecks; and
xiii. Carry out any other activities that are assigned by the PC.

Required Qualifications

- Academic degree with a major in a relevant discipline (e.g. Law, Procurement, Economics, Engineering, Natural Sciences, Finance, Business, Commerce, Public Administration or related disciples and documented previous experience in similar assignments;
- Minimum 5 years' experience in procurement and at least 3 years in a comparable donor-funded project environment;
- Significant experience in providing technical assistance in procurement management or experience of managing procurement systems preferably based on the Donor guidelines
- Seasoned knowledge of all major facets of IFAD/WB/AfDB operations and procurement policies

- Knowledge of developing country conditions generally and of procurement-related legislation, systems and practices;
- Strong communication skills and persuasiveness in presenting, negotiating and resolving highly complex issues, both orally and in writing in Portuguese and with an excellent knowledge of English as a working language;
- Ability to work independently, pay careful attention to detail and manage multiple tasks in a fast-paced environment;

Attachment 1: BADEA: Guidelines for Procurement of Goods and Contracting for Execution of Works

The guidelines below give a high-level overview of BADEA's procurement procedures. Full details can be accessed in the link below:

https://badea.org/Portal/Document_Repository/25/1_GUIDELINES_FOR_THE_PROCUREMENT2001.pdf

1.1. Responsibility for the Procurement of Goods and Contracting for the Execution of Works

1.1.1. The ultimate responsibility for the procurement of goods for the execution of works rests with the Borrower or agency appointed by him, in agreement with BADEA.

1.1.2. The rights of the Borrower vis-à-vis the bidders are governed by the tender documents and contracts to be signed.

1.1.3. These guidelines only define the relationship between BADEA and the Borrower.

1.2. BADEA's Mode of Procurement

1.2.1. Any loan granted by BADEA to finance a particular project shall be subject to public bid procedures in African a*n*d Arab countries for the procurement of goods and services produced in those countries.

1.3. Types and Sizes of Contracts

1.3.1. Contracts may be based on unit prices for work performed or materials supplied, or lump-sum price /or combination of both methods for different parts of the contract.

1.3.2. The size and scope of the various contracts depend on the size and nature of the project.

1.4. Advertising and Prequalification

1.4.1. The invitation to bid must be advertised in at least one newspaper of wide circulation in the Borrower's country and in one or more of the well-known specialized magazines, newspapers and trade publications of wide international circulation.

1.4.2. Advertising must take place a sufficient time before the date fixed for opening the tenders in order to allow bidders adequate time for obtaining the tender documents and preparing their bids.

1.4.3. The text of the advertisement must be submitted to BADEA for approval.

1.4.4. Prequalification process is used in the case of tenders for large or complex projects, and takes into consideration (1) the experience and performance of each company or firm in similar works, (2) its capabilities in terms of personnel and equipment or plant, (3) the magnitude of works under execution and progress of works, and (4) its financial status and performance during the past three years.

1.5. Submitting the Tender Documents to BADEA

1.5.1. Tender documents and any further modifications thereof, should be submitted to BADEA for approval.

1.5.2. Bids Security

1.5.2.1. Bidders must be required to submit bid-security

1.5.2.2. The amount of the Bid security may be (1) a percentage of the value of the offer or (2)a specified amount based on a percentage of the estimated cost of the contract.

1.5.2.3. The bid security shall be returned to the unsuccessful bidders.

1.5.2.4. Failure of the successful bidder to sign the contract will result in the forfeiture of the bid security and the elimination of this bidder from participating in any bid involving BADEA.

1.5.3. Tender Documents

1.5.3.1. The Tender documents and specifications shall precisely and clearly set forth the work required to be realized.

1.5.3.2. Any new information, or explanations, or corrections, or amendments, to the specifications should be conveyed to bidders.

1.6. Pricing of Bids

1.6.1. The tender documents should clearly state the currency or currencies allowed to be used in pricing the offers and which will be adopted for settlement of payments under the contract.

1.6.2. Price Adjustment

1.6.2.1. The tender documents must explicitly state where the prices to be quoted should be fixed or are subject to escalation through the application of price adjustment formula. Not applicable if implementation time does not exceed one year.

1.6.2.2. BADEA accepts reasonable adjustments in the contract prices totaling not more than 20% of the basic contract price.

1.6.3. Advance and Progress Payments

1.6.3.1. Should not exceed 20% of the total contract price in the case of supply contracts for civil works. But in the case of civil engineering works, the advance payment should not be more that 10% of the contract price, unless there are special justifications associated with the project which justify a higher percentage not to exceed 20%.

1.6.3.2. The advance payment should be covered by a Bank Guarantee and the tender documents should include a specimen of the text of the Bank Guarantee.

1.6.3.3. The tender documents should clearly specify any other amounts to be paid in advance, such as:

a) Materials delivered to the site for incorporation into the civil works and such percentage which should not be in excess of 80% of the value of such materials.

b) A maximum of 70% may also be paid against the value of work completed during the manufacture of major equipment.

1.6.4. Performance Guarantees - Retention Money

1.6.4.1. An acceptable guarantee to ensure that the works will be executed up to its completion should be submitted. This guarantee should not be less than 10% of the estimated cost of the contract.

1.6.4.2. The amount of the guarantee will vary with the type and magnitude of the work, but in whatever case it should extend beyond the completion of the contract by a sufficient period to cover a reasonable warranty period.

1.6.4.3. In the case of the civil works, that not less than 5% will be deducted from the amounts due to the contractor for the work executed, as an additional assurance for the proper execution of the contract. The tender documents should specify this percentage and the terms and conditions for its refund.

1.7. Insurance

1.7.1. The tender documents should precisely specify the types of the insurance to be provided by the successful bidder.

1.8. Liquidated Damages

1.8.1. The tender document should state the compensation to be paid for the delay in delivery or execution of the work, which shall not exceed 10% of the estimated contract price.

1.8.2. The tender documents may specify the amounts to be paid to the contractor for completing the work earlier than the time specified in the contract if such earlier completion will result in benefits to the Borrower.

1.9. Language of the Contract

1.9.1. The tender documents should be written in one of the languages widely used in international transactions.

1.10. Applicable Law - Settlement of Disputes

1.10.1. The conditions of contract should specify the applicable law and shall include provisions for the settlement of disputes.

1.11. Period between the Invitation and Submission of Bids

1.11.1. The time allowed for the preparation of bid depends, to a large extent, on the magnitude of the contract and its degree of complexity.

1.12. Bid Opening Procedures

1.12.1. Any bids received after the deadline shall be returned unopened.

1.12.2. All bids shall be opened in public at the stipulated time and place.

1.12.3. No bidder shall be allowed to alter his bid after bids are opened.

1.12.4. Clarifications shall not be accepted except in the case that they do not change the substance of the bid.

1.12.5. After opening the bids, it shall be ascertained that they:

a) Are substantially responsive to the bidding documents.
b) Are accompanied by the required securities.
c) Have been properly signed.
d) Are generally in order.

1.12.6. The responsive bids shall be technically analyzed, and all actions be recorded and substantiated in the tender's analysis report.

1.13. Post-qualification of Bidders

1.13.1. In the absence of formal prequalification, the Borrower shall make sure that the bidder whose evaluated bid is the lowest in price has the adequate technical capabilities and financial resources necessary for the effective execution of the contract.

1.14. Evaluation and Comparison of Bids

1.14.1. The Bids' evaluation process shall be consistent with the terms and conditions set forth in the tender documents.

1.14.2. The Technical criteria factors shall, as far as possible to be translated into monetary terms in accordance with the criteria set forth in the tender document.

1.14.3. For the purpose of comparison of qualified bids, the currency or currencies in which they are priced shall be converted to the single currency specified in the tender documents.

1.14.4. Margin of preference to local manufacturers and contractors from the Borrower's country or from BADEA's member country can be awarded

1.14.5. In case of goods, such preference shall not exceed 15% of the price of the lowest evaluated offer (After the exclusion of custom duties, taxes and other charges).

1.14.6. In the case of civil works, the margin of the preference shall not exceed 10% of the value of the lowest evaluated bid,

1.14.7. It should be owned by citizens of the Borrower's country or of BADEA member countries with a percentage of not less than 50% in addition to the condition to use local labor and materials in the execution of the works to the greatest extent possible and in certain cases.

1.15. Rejection of all Bids

1.15.1. Rejection of all bids may occur when: (1) the bids are not responsive to the intent of the tender document, (2) lack of enough competition because there are less than three bids.

1.16. Award of Contract

1.16.1. The contract will be awarded to the bidder whose bid has been determined to be the lowest evaluated bid and who has the required technical capacity and financial ability.

1.17. Other Methods of Procurement

a) Local competitive bidding.
b) Execution of civil works by the Borrower through force account.
c) Local or International shopping.
d) Extension of an ongoing contract.
e) procurement from the original supplier.
f) Direct purchase.
g) Equipment which is patented and can only be obtained from one manufacturer.
h) Procurement from specialized supplier to ensure that the contractor, responsible for the process design will guarantee the product on the process.
i) Loan proceeds are re-lent to beneficiaries, such as tradesmen or farmers or small enterprises, or to participate in financing subsidiary projects in which the beneficiary undertakes the procurement in accordance with established procedures, on conditions that these are acceptable to BADEA.
j) Financing for an important programme, the procurement may be in different ways.

1.18. Language of Communication with BADEA

1.18.1. Procedures should be in one of the three working languages used by BADEA.

1.19. Photocopies of Documents

1.19.1. In case photocopies of the documents are submitted to BADEA, they should be clear and readable, otherwise they may not be accepted and should be replaced.

Attachment 2: BADEA: Guidelines for Use of Consultants

The guidelines below give a high-level overview of BADEA's use of consultants procedures. Full details can be accessed in the link below:

https://badea.org/Portal/Document_Repository/26/1_GUIDELINES_THE_USE_OF_CONSULTANTS_1995.pdf

1.20. Selection of consultants

1.20.1. Selection should be based on a consultant's expertise and skills and should not be based on the price by itself.

1.21. Scope and nature of the Consultancy Services

1.21.1. Advisory or Counselling services.

1.21.2. Pre-investment studies.

1.21.3. Engineering and design study.

1.21.4. Supervision services.

1.21.5. Project management.

1.22. Types of Consulting Firms

1.22.1. Independent Consulting Firms (partnership; private companies or corporations operating internationally.

1.22.2. Autonomous/Semi-Autonomous Government organizations set up for the purpose.

1.22.3. Universities/Research Institutes.

1.22.4. Consulting Firms forming part of, or otherwise affiliated to, or associated with, or owned by, contractors or manufacturers, or Consulting Firms combining the functions of consultants with those of contractors/manufacturers.

1.23. Transfer of Technology

1.23.1. BADEA encourages the participation of domestic consultants in a project for which they are qualified and assessed as qualified and capable of performing the services, provided that such participation does not result in compromising the quality of the services.

1.23.2. In the case of a joint venture for consulting services, the leadership of the joint venture and the ultimate responsibility for the services should be stipulated in the formal document setting out such venture.

1.24. Definition of Domestic Firms

1.24.1. A domestic Firm is defined as a firm which fulfills the following conditions:

a) It is registered in the country where the assignment is to be carried out.

b) More than 50% of equity is held by nationals or institutions of that Country.
c) Its Chief Executive Officer is a national of the country.
d) More than half of its managerial staff and more than half of its total professional staff are from that country.

1.25. Forms of Association between Consulting Firms

1.25.1. Association with one shortlisted firm provided that the client and BADEA are advised within 14 days of receipt of RFP.

1.25.2. With non-shortlisted firms if the latter are given specific responsibilities of the assignment.

1.26. Selection Process

1.26.1. Preparation of the Terms of Reference (TOR).

1.26.2. Preparation of the cost estimate (budget).

1.26.3. Drawing up a short-list of qualified consultants.

1.26.4. Agreement on a selection Procedures and criteria between the borrow and the Fund.

1.26.5. Issuing a Request for Proposal (RFP) to the short-listed consultants.

1.26.6. Evaluation of the proposals and selection of the best offer followed, as necessary, by negotiations with the chosen consultants.

1.27. Technical Evaluation qualitative analysis is based on:

1.27.1. The Consultant's professional qualifications, its general experience and standing. These should be examined in greater depth than was the case at the pre-qualification stage.

1.27.2. The consultant's experience and expertise in the field of the assignment as well as in a similar geographical area to that of the project.

1.27.3. The thoroughness of the consultant's approach, of its comments on the "TOR" and of the work plan as set out in the technical proposal. These are prime indicators as to a consultant's understanding of the assignment and its implications as well as the consultant's creativity, which may be the attribute or quality most needed for the accomplishment of the task.

1.27.4. The expertise of the key personnel proposed for the assignment and whether the majority of such personnel are drawn from the permanent staff of the consultant.

1.27.5. The preferential consideration given to domestic consultants and/or consultants from the BADEA's member countries.

1.28. The Financial Proposal

1.28.1. The Financial proposals must be arranged in ascending order of the prices, with the lowest securing 100 points while other proposals are given proportional points in the ratio of the lowest price to the respective price of the particular proposal.

1.28.2. After a list has been established on the basis of Technical Evaluation, envelopes containing g financial proposals of the top-ranking consultants are then opened.

1.28.3. The overall ranking is determined by weighted points on the basis of pre-agreed weights allocated to the quality and price elements.

1.29. Remuneration for the Consulting service

1.29.1. Lump sum Agreements.

1.29.2. Personal time Rate plus reimbursable cost (man-month based agreement).

1.29.3. Remuneration based on the cost of the installed equipment and constructed works plus reimbursable direct costs.

Appendix 9: Project Cost and Financing

A. Main Assumptions

1. Contingencies. Physical contingency of 5% has been applied to works only (road rehabilitation, roads maintenance, irrigation systems, etc.) and whereas price contingencies have been applied throughout the whole project cost tables.

2. Inflation. The statistics show the average inflation rate in Angola from 2012 to 2015 was 10.2%. Over the years and until inflation has rose to range of 20% in 2018 but projected to decline to 7.2 by 2022. The effect of inflation has been considered in the determination of the project costs.

3. Exchange Rate. The Angolan Kwanza has continued to gain the grounds against the US dollar. During the design mission the prevailing exchange rate was 233 to trade at 247 by the end of 2018.

4. Taxes and Duties. Import duties (on vehicles, office furniture, equipment, etc.) and VAT are applied to costs of transactions were appropriate. The standard rate of VAT in Angola is 10%. This tax is levied on the supply of goods and services as well as on the import of goods into Angola. The tax rate ranges from 2% to 30%, depending on the goods or service.

B. Project costs

5. The total SREP investment and incremental recurrent costs, including physical and price contingencies, are estimated at US$ 150 million (AOA 34.5 billion). Table 9 below presents a breakdown of the costs by post MTR components. The detailed cost tables and additional summary tables are presented in section D and E to this Appendix.

6. Institutional capacity building in base costs totals USD 85.2 million (59% of base total base costs). With this first component the investment in public rural infrastructure accounts for USD 62.3 million (43% of base costs) and strengthening capacity for improved services to family members at USD 22.9 million (16% of base costs). Component 2 Family Farmer Strengthening and Investment in base costs totals USD 37.9 million (26% of base costs). Within this second component, Strengthening capacity for family members in base costs totals USD 21.6 million (15% of base costs). Investing in Family Farming in base costs totals USD 16.3 million (11% of base costs). Component 3 Project coordination and management in base costs totals USD 22.1 million (15% of base costs) of which the SREP Project Implementation Unit accounts for USD 15.9 million (11%) and the Single Coordination Unit (SCU)– Portfolio Implementation Facility (PIF) accounts for USD 6.1 million (4% of total base costs). The costing has been done in USD but still price contingencies (USD 3.2 million) have been provided. Physical contingencies amount to USD 1.6 million.

Table 9: Project Costs by Component

C. Financing Plan

7. Total SREP costs, including price contingencies, duties and taxes, are estimated at about USD150 million over the six-year implementation period. IFAD will fund the Project through a loan of around USD 51 million on ordinary terms. The IFAD loan will be divided into two tranches; an initial funding of USD29.755 million and a second disbursement of USD21.245 million. The second will kick-in in year 3 of project implementation and will be conditional on the performance of the IFAD portfolio. This implies a gap funding of USD million 21.245 or 14.2% of project costs. GoA will finance taxes, duties and contributions to extension infrastructure amounting to a total of USD 10 million,

representing about 6.7% of total costs. The estimate of taxes and duties is based on prevailing rates at the time of design. In conformity with the principle that no taxes or duties will be financed out of the proceeds of the IFAD Loan, any changes in the rates of taxes and duties would have to be met by GoA. Beneficiaries will contribute USD 6.5 million, representing about 4.3% of Project costs, and will consist mainly of in-kind contribution (labour[70]). BADEA will contribute about USD 40 million (26.7%) and Agence Français de Development (AFD) a further USD 42 million (28%). The summary of the financing plan is presented in the table below:

Angola
Smallholder Resilience Enhancement Project (SREP)
Project Components by Year -- Base Costs
(USD '000)

	Base Cost						
	PY1	**PY2**	**PY3**	**PY4**	**PY5**	**PY6**	**Total**
A. Component 1: Institutional capacity building							
1. Strengtening Capacity for Improved Services to Family Farmers							
Investment costs	5,507	5,914	5,585	1,435	89	112	18,642
Recurrent costs- Extension staff deployment	715	715	715	715	715	715	4,291
Subtotal	6,222	6,629	6,300	2,150	804	827	22,933
2. Investing in Public Rural Infrastracture							
Feeder road rehabilitation & Maintenance	2,564	7,964	7,214	6,966	8,706	5,200	38,614
Market infrastructure	1,068	1,068	918	658	114	64	3,890
Sustainanble land & w ater management	1,355	5,678	5,830	5,751	765	384	19,761
Subtotal	4,987	14,710	13,962	13,375	9,585	5,648	62,265
Subtotal	11,209	21,339	20,262	15,524	10,389	6,475	85,197
B. Component 2: Family Farmer Strenthening and Investment							
1. Strengthening Capacity For Family Farmers	2,834	4,090	4,400	4,539	3,908	1,885	21,655
2. Investing in Family Farming	1,255	2,127	3,406	3,438	3,408	2,640	16,273
Subtotal	4,089	6,217	7,806	7,977	7,315	4,525	37,928
C. Component 3: Programme Cordination							
1. SREP Project implementation unit	3,348	2,422	2,547	2,503	2,447	2,672	15,938
2. Single Coordination Unit (SCU)-Programme Implementation Facility (PIF)	1,429	1,213	1,087	979	943	466	6,115
Subtotal	4,776	3,634	3,633	3,481	3,389	3,137	22,052
Total BASELINE COSTS	20,074	31,190	31,701	26,983	21,093	14,137	145,178
Physical Contingencies	159	375	346	326	271	168	1,645
Price Contingencies							
Inflation							
Local	40	207	335	362	338	259	1,541
Foreign	42	220	356	384	359	275	1,636
Subtotal Inflation	82	427	691	746	698	535	3,178
Devaluation	-	-	-	-	-	-	-
Subtotal Price Contingencies	82	427	691	746	698	535	3,178
Total PROJECT COSTS	20,316	31,992	32,738	28,054	22,062	14,839	150,000
Taxes	1,297	2,329	2,214	1,823	1,482	853	10,000
Foreign Exchange	10,159	16,002	16,379	14,038	11,041	7,428	75,048

Table 10: Financing Plan by Components (USD'000)

Angola
Smallholder Resilience Enhancement Project (SREP)
Components by Financiers
(USD '000)

	IFAD 1		BADEA		AFD		GoA		Beneficiaries		IFAD 2		Total		For.	Local (Excl.	Duties &
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Exch.	Taxes)	Taxes
A. Component 1: Institutional capacity building																	
1. Strengtening Capacity for Improved Services to Family Farmers																	
Investment costs	5,518	29.1	-	-	8,394	44.3	1,130	6.0	-	-	3,917	20.7	18,960	12.6	9,485	8,344	1,130
Recurrent costs- Extension staff deployment	2,146	50.0	-	-	-	-	-	-	-	-	2,146	50.0	4,291	2.9	2,146	2,146	-
Subtotal	7,664	33.0	-	-	8,394	36.1	1,130	4.9	-	-	6,063	26.1	23,251	15.5	11,630	10,490	1,130
2. Investing in Public Rural Infrastracture																	
Feeder road rehabilitation & Maintenance	-	-	36,603	88.5	-	-	4,763	11.5	-	-	-	-	41,366	27.6	20,706	15,896	4,763
Market infrastructure	1,150	28.0	-	-	1,749	42.7	384	9.4	-	-	816	19.9	4,099	2.7	2,051	1,664	384
Sustainanble land & w ater management	5,709	27.6	-	-	8,685	41.9	1,646	7.9	617	3.0	4,053	19.6	20,711	13.8	10,364	8,700	1,646
Subtotal	6,859	10.4	36,603	55.3	10,434	15.8	6,794	10.3	617	0.9	4,869	7.4	66,176	44.1	33,122	26,260	6,794
Subtotal	14,522	16.2	36,603	40.9	18,828	21.1	7,925	8.9	617	0.7	10,932	12.2	89,427	59.6	44,752	36,750	7,925
B. Component 2: Family Farmer Strenthening and Investment																	
1. Strengthening Capacity For Family Farmers	6,350	29.3	-	-	9,659	44.5	1,068	4.9	112	0.5	4,508	20.8	21,697	14.5	10,849	9,780	1,068
2. Investing in Family Farming	3,296	19.9	-	-	5,013	30.3	147	0.9	5,771	34.8	2,340	14.1	16,566	11.0	8,287	8,132	147
Subtotal	9,646	25.2	-	-	14,673	38.3	1,215	3.2	5,883	15.4	6,847	17.9	38,263	25.5	19,136	17,912	1,215
C. Component 3: Programme Cordination																	
1. SREP Project implementation unit	3,674	23.0	3,397	21.2	5,589	34.9	733	4.6	-	-	2,608	16.3	16,001	10.7	8,001	7,267	733
2. Single Coordination Unit (SCU)-Programme Implementation Facility (PIF)	1,913	30.3	-	-	2,911	46.1	127	2.0	-	-	1,358	21.5	6,310	4.2	3,158	3,024	127
Subtotal	5,587	25.0	3,397	15.2	8,499	38.1	860	3.9	-	-	3,966	17.8	22,311	14.9	11,160	10,291	860
Total PROJECT COSTS	29,755	19.8	40,000	26.7	42,000	28.0	10,000	6.7	6,500	4.3	21,745	14.5	150,000	100.0	75,048	64,953	10,000

[70]https://tradingeconomics.com/angola/minimum-wages

D. Summary Cost Tables

Table 11: Components Project Cost Summary

Angola
Smallholder Resilience Enhancement Project (SREP)

Components Project Cost Summary	(Kwanza Million)			(USD '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
A. Component 1: Institutional capacity building								
1. Strengtening Capacity for Improved Services to Family Farmers								
Investment costs	2,144	2,144	4,289	9,321	9,321	18,642	50	13
Recurrent costs- Extension staff deployment	494	494	987	2,146	2,146	4,291	50	3
Subtotal	2,638	2,638	5,276	11,466	11,466	22,933	50	16
2. Investing in Public Rural Infrastracture								
Feeder road rehabilitation & Maintenance	4,442	4,442	8,883	19,307	19,307	38,614	50	27
Market infrastructure	447	447	895	1,945	1,945	3,890	50	3
Sustainanble land & w ater management	2,273	2,273	4,546	9,880	9,880	19,761	50	14
Subtotal	7,162	7,162	14,324	31,132	31,132	62,265	50	43
Subtotal	9,800	9,800	19,600	42,599	42,599	85,197	50	59
B. Component 2: Family Farmer Strenthening and Investment								
1. Strengthening Capacity For Family Farmers	2,491	2,491	4,982	10,828	10,828	21,655	50	15
2. Investing in Family Farming	1,872	1,872	3,744	8,137	8,137	16,273	50	11
Subtotal	4,363	4,363	8,725	18,964	18,964	37,928	50	26
C. Component 3: Programme Cordination								
1. SREP Project implementation unit	1,833	1,833	3,667	7,969	7,969	15,938	50	11
2. Single Coordination Unit (SCU)-Programme Implementation Facility (PIF)	703	703	1,407	3,057	3,057	6,115	50	4
Subtotal	2,537	2,537	5,073	11,026	11,026	22,052	50	15
Total BASELINE COSTS	16,699	16,699	33,398	72,589	72,589	145,178	50	100
Physical Contingencies	189	189	378	822	822	1,645	50	1
Price Contingencies	355	376	731	1,541	1,636	3,178	51	2
Total PROJECT COSTS	17,243	17,265	34,508	74,953	75,048	150,000	50	103

Table 12: Expenditure Accounts Project Cost Summary

Angola
Smallholder Resilience Enhancement Proje

Expenditure Accounts Project Cost S	(Kwanza Million)			(USD '000)			% Foreign Exchange	% Total Base Costs
	Local	Foreign	Total	Local	Foreign	Total		
I. Investment Costs								
A. Works	7,044	7,044	14,088	30,620	30,620	61,240	50	42
B. matching grant	2,451	2,451	4,902	10,655	10,655	21,309	50	15
C. Vehicles	288	288	575	1,250	1,250	2,500	50	2
D. Goods, Services & Inputs	1,883	1,883	3,766	8,186	8,186	16,372	50	11
E. Consultancies	1,125	1,125	2,249	4,889	4,889	9,777	50	7
F. Trainings	1,553	1,553	3,105	6,749	6,749	13,499	50	9
Total Investment Costs	14,343	14,343	28,687	62,348	62,348	124,696	50	86
II. Recurrent Costs								
A. Operating costs	552	552	1,104	2,400	2,400	4,800	50	3
B. Salaries and allow ances	1,804	1,804	3,608	7,841	7,841	15,682	50	11
Total Recurrent Costs	2,356	2,356	4,712	10,241	10,241	20,482	50	14
Total BASELINE COSTS	16,699	16,699	33,398	72,589	72,589	145,178	50	100
Physical Contingencies	189	189	378	822	822	1,645	50	1
Price Contingencies	355	376	731	1,541	1,636	3,178	51	2
Total PROJECT COSTS	17,243	17,265	34,508	74,953	75,048	150,000	50	103

Table 13: Project Components by Year – Totals Including Contingencies (US $ 000)

Angola
Smallholder Resilience Enhancement Project (SREP)
Project Components by Year -- Totals Including Contingencies
(USD '000)

	Totals Including Contingencies						
	PY1	**PY2**	**PY3**	**PY4**	**PY5**	**PY6**	**Total**
A. Component 1: Institutional capacity building							
1. Strengtening Capacity for Improved Services to Family Farmers							
Investment costs	5,535	6,008	5,736	1,474	89	117	18,960
Recurrent costs- Extension staff deployment	715	715	715	715	715	715	4,291
Subtotal	6,251	6,723	6,451	2,189	805	832	23,251
2. Investing in Public Rural Infrastracture							
Feeder road rehabilitation & Maintenance	2,649	8,351	7,663	7,491	9,479	5,733	41,366
Market infrastructure	1,106	1,121	974	706	122	70	4,099
Sustainanble land & w ater management	1,414	5,885	6,112	6,100	797	403	20,711
Subtotal	5,168	15,356	14,749	14,298	10,398	6,207	66,176
Subtotal	11,419	22,079	21,200	16,486	11,203	7,039	89,427
B. Component 2: Family Farmer Strenthening and Investment							
1. Strengthening Capacity For Family Farmers	2,836	4,098	4,413	4,548	3,918	1,885	21,697
2. Investing in Family Farming	1,268	2,156	3,449	3,486	3,489	2,718	16,566
Subtotal	4,105	6,253	7,862	8,034	7,407	4,602	38,263
C. Component 3: Programme Cordination							
1. SREP Project implementation unit	3,354	2,424	2,555	2,512	2,456	2,699	16,001
2. Single Coordination Unit (SCU)-Programme Implementation Facility (PIF)	1,437	1,235	1,121	1,022	996	498	6,310
Subtotal	4,792	3,660	3,676	3,534	3,452	3,197	22,311
Total PROJECT COSTS	20,316	31,992	32,738	28,054	22,062	14,839	150,000

Table 14: Components by Financiers (US $ 000)

Angola
Smallholder Resilience Enhancement Project (SREP)
Components by Financiers
(USD '000)

	IFAD 1		BADEA		AFD		GoA		Beneficiaries		IFAD 2		Total		For.	Local (Excl.	Duties &
	Amount	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Exch.**	**Taxes)**	**Taxes**
A. Component 1: Institutional capacity building																	
1. Strengtening Capacity for Improved Services to Family Farmers																	
Investment costs	5,518	29.1	-	-	8,394	44.3	1,130	6.0	-	-	3,917	20.7	18,960	12.6	9,485	8,344	1,130
Recurrent costs- Extension staff deployment	2,146	50.0	-	-	-	-	-	-	-	-	2,146	50.0	4,291	2.9	2,146	2,146	-
Subtotal	7,664	33.0	-	-	8,394	36.1	1,130	4.9	-	-	6,063	26.1	23,251	15.5	11,630	10,490	1,130
2. Investing in Public Rural Infrastracture																	
Feeder road rehabilitation & Maintenance	-	-	36,603	88.5	-	-	4,763	11.5	-	-	-	-	41,366	27.6	20,706	15,896	4,763
Market infrastructure	1,150	28.0	-	-	1,749	42.7	384	9.4	-	-	816	19.9	4,099	2.7	2,051	1,664	384
Sustainanble land & w ater management	5,709	27.6	-	-	8,685	41.9	1,646	7.9	617	3.0	4,053	19.6	20,711	13.8	10,364	8,700	1,646
Subtotal	6,859	10.4	36,603	55.3	10,434	15.8	6,794	10.3	617	0.9	4,869	7.4	66,176	44.1	33,122	26,260	6,794
Subtotal	14,522	16.2	36,603	40.9	18,828	21.1	7,925	8.9	617	0.7	10,932	12.2	89,427	59.6	44,752	36,750	7,925
B. Component 2: Family Farmer Strenthening and Investment																	
1. Strengthening Capacity For Family Farmers	6,350	29.3	-	-	9,659	44.5	1,068	4.9	112	0.5	4,508	20.8	21,697	14.5	10,849	9,780	1,068
2. Investing in Family Farming	3,296	19.9	-	-	5,013	30.3	147	0.9	5,771	34.8	2,340	14.1	16,566	11.0	8,287	8,132	147
Subtotal	9,646	25.2	-	-	14,673	38.3	1,215	3.2	5,883	15.4	6,847	17.9	38,263	25.5	19,136	17,912	1,215
C. Component 3: Programme Cordination																	
1. SREP Project implementation unit	3,674	23.0	3,397	21.2	5,589	34.9	733	4.6	-	-	2,608	16.3	16,001	10.7	8,001	7,267	733
2. Single Coordination Unit (SCU)-Programme Implementation Facility (PIF)	1,913	30.3	-	-	2,911	46.1	127	2.0	-	-	1,358	21.5	6,310	4.2	3,158	3,024	127
Subtotal	5,587	25.0	3,397	15.2	8,499	38.1	860	3.9	-	-	3,966	17.8	22,311	14.9	11,160	10,291	860
Total PROJECT COSTS	29,755	19.8	40,000	26.7	42,000	28.0	10,000	6.7	6,500	4.3	21,745	14.5	150,000	100.0	75,048	64,953	10,000

Table 15 Project costs by expenditure category by financier

(Thousands of United States dollars)

Angola
Smallholder Resilience Enhancement Project (SREP)

Components by Financiers (USD '000)	**IFAD 1**		**BADEA**		**AFD**		**GoA**		**Beneficiaries**		**IFAD 2**		**Total**		**For. Exch.**	**Local (Excl. Taxes)**	**Duties & Taxes**
	Amount	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**	**Amount**	**%**			
A. Component 1: Institutional capacity building																	
1. Strengtening Capacity for Improved Services to Family Farmers																	
Investment costs	5,518	29.1	-	-	8,394	44.3	1,130	6.0	-	-	3,917	20.7	18,960	12.6	9,485	8,344	1,130
Recurrent costs- Extension staff deployment	2,146	50.0	-	-	-	-	-	-	-	-	2,146	50.0	4,291	2.9	2,146	2,146	-
Subtotal	7,664	33.0	-	-	8,394	36.1	1,130	4.9	-	-	6,063	26.1	23,251	15.5	11,630	10,490	1,130
2. Investing in Public Rural Infrastracture																	
Feeder road rehabilitation & Maintenance	-	-	36,603	88.5	-	-	4,763	11.5	-	-	-	-	41,366	27.6	20,706	15,896	4,763
Market infrastructure	1,150	28.0	-	-	1,749	42.7	384	9.4	-	-	816	19.9	4,099	2.7	2,051	1,664	384
Sustainanble land & w ater management	5,709	27.6	-	-	8,685	41.9	1,646	7.9	617	3.0	4,053	19.6	20,711	13.8	10,364	8,700	1,646
Subtotal	6,859	10.4	36,603	55.3	10,434	15.8	6,794	10.3	617	0.9	4,869	7.4	66,176	44.1	33,122	26,260	6,794
Subtotal	14,522	16.2	36,603	40.9	18,828	21.1	7,925	8.9	617	0.7	10,932	12.2	89,427	59.6	44,752	36,750	7,925
B. Component 2: Family Farmer Strenthening and Investment																	
1. Strengthening Capacity For Family Farmers	6,350	29.3	-	-	9,659	44.5	1,068	4.9	112	0.5	4,508	20.8	21,697	14.5	10,849	9,780	1,068
2. Investing in Family Farming	3,296	19.9	-	-	5,013	30.3	147	0.9	5,771	34.8	2,340	14.1	16,566	11.0	8,287	8,132	147
Subtotal	9,646	25.2	-	-	14,673	38.3	1,215	3.2	5,883	15.4	6,847	17.9	38,263	25.5	19,136	17,912	1,215
C. Component 3: Programme Cordination																	
1. SREP Project implementation unit	3,674	23.0	3,397	21.2	5,589	34.9	733	4.6	-	-	2,608	16.3	16,001	10.7	8,001	7,267	733
2. Single Coordination Unit (SCU)-Programme Implementation Facility (PIF)	1,913	30.3	-	-	2,911	46.1	127	2.0	-	-	1,358	21.5	6,310	4.2	3,158	3,024	127
Subtotal	5,587	25.0	3,397	15.2	8,499	38.1	860	3.9	-	-	3,966	17.8	22,311	14.9	11,160	10,291	860
Total PROJECT COSTS	29,755	19.8	40,000	26.7	42,000	28.0	10,000	6.7	6,500	4.3	21,745	14.5	150,000	100.0	75,048	64,953	10,000

Table 16 Summary for Co-financing

Financier	Geographic focus	Investment areas/priorities
BADEA	SREP North and SREP South	Rural infrastructure development
AFD	SREP South	Ecosystem based adaptation and rural infrastructure development

E. Detailed Cost Tables

Angola
Smallholder Resilience Enhancement Project (SREP)
Table 1.1. Component 1: Extensional service strengthening: Strengthening Capacity for Improved Services for Family F

Detailed Costs	Unit	Quantities							Unit Cost	Totals Including Contingencies (USD)							
		PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total	Expenditure Account
I. Investment Costs																	
A. Agriculture extension service delivery																	
1. Transport (vehicles)	No	15	6	-	-	-	-	21	40,000	603,733	244,498	-	-	-	-	848,231	VEHICLES_1
2. Motorbikes	No	142	50	38	-	-	-	230	6,000	857,300	305,621	235,162	-	-	-	1,398,083	VEHICLES_1
3. Rehabilitation of offices /a	No	4	3	3	2	-	-	12	75,000	301,866	229,216	232,068	156,636	-	-	919,786	WORKS_1
4. Rehabilitation of offices /b	No	4	5	5	2	-	-	16	200,000	804,976	1,018,738	1,031,411	417,697	-	-	3,272,822	WORKS_1
5. Rehabilitation of residential houses	No	4	5	2	-	-	-	11	100,000	402,488	509,369	206,282	-	-	-	1,118,139	WORKS_1
6. Construction of new residential houses	No	4	8	9	-	-	-	21	300,000	1,207,464	2,444,971	2,784,811	-	-	-	6,437,246	WORKS_1
7. MoU with provincial office of infrastructure and technical services (Supervision of works)	No	4	3	-	-	-	-	7	20,000	80,496	61,121	-	-	-	-	141,617	CONSULTANCIES_1
Subtotal										4,258,323	4,813,534	4,489,734	574,334	-	-	14,135,924	
B. Training of extension staff																	
1. Training in FFS	No	5	3	3	2	-	-	13	40,000	200,000	120,000	120,000	80,000	-	-	520,000	TRAININGS
2. Training in technical subjects	No	5	4	4	4	1	1	19	40,000	200,000	160,000	160,000	160,000	40,000	40,000	760,000	TRAININGS
3. Training in NRM planning	No	3	2	-	-	-	-	5	25,000	75,000	50,000	-	-	-	-	125,000	TRAININGS
Subtotal										475,000	330,000	280,000	240,000	40,000	40,000	1,405,000	
C. Capacity building for climate change																	
1. Training in climate change adoption /c	Sessions	10	20	20	10	-	-	60	18,000	180,000	360,000	360,000	180,000	-	-	1,080,000	TRAININGS
2. Equipment purchase /d	Ls	1	1	-	-	-	-	2	50,000	50,000	50,000	-	-	-	-	100,000	GOODS_SERVICES_&_INPUTS
3. Technical assistance																	
Environmental expert	p-m	6	4	2	2	2	-	16	18,000	108,000	72,000	36,000	36,000	36,000	-	288,000	CONSULTANCIES_1
Subtotal										338,000	482,000	396,000	216,000	36,000	-	1,468,000	
D. Nutrition																	
1. Culinary unit, recipe development and communication materials	Province	3	4	-	-	-	-	7	2,800	8,400	11,200	-	-	-	-	19,600	GOODS_SERVICES_&_INPUTS
2. Training extension workers on nutrition	persons	50	50	50	50	10	10	220	200	10,000	10,000	10,000	10,000	2,000	2,000	44,000	TRAININGS
3. Food KAP surveys and home grown school feeding																	
Food KAP surveys	Study	2	2	2	2	-	-	8	40,000	80,000	80,000	80,000	80,000	-	-	320,000	CONSULTANCIES_1
Training of school meals managers and cooks on food preparation	Sessions	3	6	6	6	6	-	27	500	1,500	3,000	3,000	3,000	3,000	-	13,500	TRAININGS
Subtotal										81,500	83,000	83,000	83,000	3,000	-	333,500	
Subtotal										99,900	104,200	93,000	93,000	5,000	2,000	397,100	

Detailed Table 1.1: Strengthening capacity for improved services to family members… continued

Detailed Costs	Unit	Quantities							Unit Cost	Totals Including Contingencies (USD)							
		PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total	Expenditure Account
E. Gender																	
1. National Gender study /e	Study	1	-	1	-	-	1	3	70,000	70,434	-	72,193	-	-	74,913	217,539	GOODS_SERVICES_&_INPUTS
F. Animal health																	
1. Solar freezer (1 per municipality)	No	4	4	4	1	-	-	13	2,500	10,062	10,187	10,313	2,610	-	-	33,172	GOODS_SERVICES_&_INPUTS
2. CAHW technicians (kit + motor bike) /f	No	22	30	40	40	-	-	132	7,000	154,955	213,924	288,770	292,352	-	-	950,001	GOODS_SERVICES_&_INPUTS
3. CAHW (kit + bike) /g	No	25	25	25	25	-	-	100	1,800	45,279	45,841	46,409	46,985	-	-	184,515	GOODS_SERVICES_&_INPUTS
4. Training of CAWH municipal level	No	3	-	2	-	-	-	5	25,000	75,465	-	51,566	-	-	-	127,031	TRAININGS
5. Training of CAHW community level	No	1	1	1	1	1	-	5	8,000	8,050	8,149	8,251	8,353	8,457	-	41,259	TRAININGS
Subtotal										293,811	278,101	405,309	350,301	8,457	-	1,335,979	
Total Investment Costs										5,535,468	6,007,835	5,736,236	1,473,634	89,457	116,913	18,959,542	
II. Recurrent Costs																	
A. Provision of working conditions for efficiency of government extension staff																	
1. Extension staff deployment /h	No	149	149	149	149	149	149	894	4,800	715,200	715,200	715,200	715,200	715,200	715,200	4,291,200	SALARIES_AND_ALLOWANCES_1
Total Recurrent Costs										715,200	715,200	715,200	715,200	715,200	715,200	4,291,200	
Total										6,250,668	6,723,035	6,451,436	2,188,834	804,657	832,113	23,250,742	

\a Estimated 1/3 of construction cost for new building.
\b Cost estimated from experience with MOSAP1
\c training includes agro ecology mapping, climate risk analysis and climate modelling
\d seed money for equipment to be used in the event that metro france project doesn't link up to SREP
\e focus on targeting and gender in all areas
\f 6 per municipality with proirity in the south
\g 1 per 10 communities in the south
\h Year 1 IFAD 100%, year 2 IFAD 100%, year 3 IFAD 60%, year 4 IFAD 40%, year 5and 6 GoA 100% funding.

Detailed Table 1.2: Investing in climate resilient public rural infrastructure

Angola
Smallholder Resilience Enhancement Project (SREP)
Table 1.2. Component 1: Institutional Capacity Building: Investing in public rural infrastructure

Detailed Costs		Quantities							Unit Cost	Totals Including Contingencies (USD)							
	Unit	PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total	Expenditure Account
I. Investment Costs																	
A. Feeder road rehabilitation and maintenance																	
1. Rehabilitation																	
Design and supervision /a	Km	140	140	140	-	-	-	420	3,200	464,315	470,100	475,958	-	-	-	1,410,373	WORKS_1
Feeder roads rehabilitation works	Km	-	130	130	130	119	-	509	40,000	-	5,456,522	5,524,512	5,593,351	5,183,868	-	21,758,253	WORKS_1
Construction of stractures/ crossings /b	Ls	2	2	1	1	-	-	6	800,000	1,658,267	1,678,929	849,925	860,515	-	-	5,047,636	WORKS_1
Subtotal										2,122,582	7,605,551	6,850,395	6,453,866	5,183,868	-	28,216,262	
2. Maintenance																	
Development of (including support to) road gangs /c	Unit	10	35	35	35	25	-	140	2,000	21,131	74,879	75,812	76,757	55,510	-	304,090	GOODS_SERVICES_&_INPUTS
Routine maintenance	Km	50	100	150	200	200	300	1,000	4,000	207,283	419,732	637,444	860,516	871,238	1,323,142	4,319,356	WORKS_1
Development of province roads maintenance plans	Unit	4	3	-	-	-	-	7	50,000	201,243	152,808	-	-	-	-	354,051	GOODS_SERVICES_&_INPUTS
Periodic maintenance /d	Km	-	-	-	-	150	200	350	20,000	-	-	-	-	3,266,995	4,410,229	7,677,224	WORKS_1
Subtotal										429,657	647,420	713,256	937,273	4,193,743	5,733,371	12,654,720	
3. Technical assistance																	
Civil engineer	per months	12	12	12	12	12	-	60	8,000	96,597	97,798	99,015	100,246	101,493	-	495,149	CONSULTANCIES_1
Subtotal										2,648,836	8,350,770	7,662,666	7,491,385	9,479,104	5,733,371	41,366,132	
B. Market Infrastracture																	
1. Dialogue platforms between actors of valve chains																	
Review of existing platforms and mechanisms /e	Study	1	-	-	-	-	-	1	30,000	30,187	-	-	-	-	-	30,187	GOODS_SERVICES_&_INPUTS
Supporting platforms and decision mechanisms	Meetings	4	4	4	4	4	4	24	1,000	4,025	4,075	4,126	4,177	4,229	4,282	24,914	GOODS_SERVICES_&_INPUTS
Study tour in country and abroad	Ls	-	-	1	1	1	-	3	50,000	-	-	51,566	52,206	52,853	-	156,625	TRAININGS
Subtotal										34,212	4,075	55,692	56,383	57,083	4,282	211,726	
2. Construction of storage and other market facilities																	
Design and supervision	Ls	4	4	4	4	-	-	16	1,000	4,146	4,197	4,250	4,303	-	-	16,895	WORKS_1
Construction works	Ls	5	5	4	3	-	-	17	200,000	1,036,412	1,049,316	849,904	645,365	-	-	3,580,996	WORKS_1
Collection points storage and other facilities	No	1	2	2	-	2	2	9	30,000	31,092	62,957	63,740	-	65,334	66,146	289,269	WORKS_1
Subtotal										1,071,650	1,116,470	917,893	649,667	65,334	66,146	3,887,160	
Subtotal										1,105,861	1,120,545	973,585	706,050	122,416	70,428	4,098,886	
C. Sustainable land and water management																	
1. Development of Small scale water infrastructure																	
a. Studies, Design and Supervision /f	Ls									2,000	4,000	8,000	8,000	4,000	-	26,000	CONSULTANCIES_1
b. Construction works /g	Ls									-	50,000	100,000	200,000	200,000	100,000	650,000	WORKS_1
c. Support to Water User Associations (WUAs) establishment /h	Ls									2,000	1,000	1,000	1,000	1,000	-	6,000	TRAININGS
Subtotal										4,000	55,000	109,000	209,000	205,000	100,000	682,000	

Detailed Table 1.2: Investing in climate resilient public rural infrastructure…Continued

Detailed Costs		Quantities							Unit Cost	Totals Including Contingencies (USD)							
	Unit	PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total	Expenditure Account
2. Development of small scale water irrigation																	
a. Studies, designs and supervision /i	Ha	-	100	200	200	200	-	700	1,100	-	112,064	226,922	229,749	232,612	-	801,348	CONSULTANCIES_1
b. Construction/ rehabilitation w orks	Ha	100	200	200	-	-	-	500	10,000	1,056,542	2,139,413	2,166,071	-	-	-	5,362,026	WORKS_1
c. Construction/ rehabilitation w orks	Ha	-	-	-	200	-	-	200	10,000	-	-	-	2,193,062	-	-	2,193,062	WORKS_1
d. Support to development of Water User Association (WUAs)	No	-	5	10	10	10	-	35	2,000	-	10,188	20,629	20,886	21,146	-	72,847	TRAININGS
e. Technical assistance																	
Water resource expert	p-m	3	3	1	-	-	-	7	11,000	33,205	33,619	11,346	-	-	-	78,170	CONSULTANCIES_1
Water resource officer	p-m	12	12	12	-	-	-	36	11,000	132,822	134,475	136,150	-	-	-	403,447	CONSULTANCIES_1
Subtotal										166,027	168,094	147,495	-	-	-	481,617	
Subtotal										1,222,569	2,429,759	2,561,117	2,443,696	253,758	-	8,910,899	
3. Sustainable land management																	
a. Rehabilitation of pastures	Ha	-	6,000	6,000	6,000	-	-	18,000	500	-	3,056,150	3,094,128	3,132,578	-	-	9,282,856	MATCHING_GRANT_1
b. Water and soil conservation	Ha	-	750	750	750	750	750	3,750	250	-	191,003	193,373	195,772	198,200	200,659	979,007	MATCHING_GRANT_1
c. Technical assistance																	
Sustaianble land management expert	p-m	2	2	2	1	1	-	8	18,000	36,224	36,674	37,130	18,795	19,029	-	147,852	CONSULTANCIES_1
Sustainable land management officer	p-m	12	12	12	12	12	12	72	8,000	96,596	97,797	99,012	100,242	101,488	102,749	597,885	CONSULTANCIES_1
Pasture expert	p-m	3	1	1	-	1	-	6	18,000	54,336	18,337	18,565	-	19,029	-	110,266	CONSULTANCIES_1
Subtotal										187,156	152,808	154,706	119,038	139,546	102,749	856,003	
Subtotal										187,156	3,399,961	3,442,207	3,447,387	337,747	303,409	11,117,866	
Subtotal										1,413,724	5,884,720	6,112,324	6,100,084	796,504	403,409	20,710,765	
Total										5,168,422	15,356,035	14,748,575	14,297,519	10,398,025	6,207,207	66,175,782	

\a Estimated at 8% (it shouldn't be more than 10%) of construction costs
\b An average of 20% of total road rehabilitation cost w ill be allocated to construct crossings
\c Based on an average of 1 gang set up every 4 kms along the road
\d Every 3 years from rehabilitation
\e As a baseline investigation to indentify types and location fo facilities, as w ell as designs
\f Estimated to 8% (should not be more than 10% of construction cost)
\g Based on assumption of one WUA per SSI (average 20 Ha per SSI)
\h Based on assumption of one WUA per SSI (average 20 Ha per SSI)
\i Estimated to 8% (it shouldnot be more than 10%of construction cost)

Detailed Tables 2.1: Strengthening capacity for family farmers

Angola
Smallholder Resilience Enhancement Project (SREP)
Table 2.1. Component 2: Family Farmer Strengthening and Investment: Strenthe

Detailed Costs	Unit	Quantities							Unit Cost	Totals Including Contingencies (USD)							Expenditure Account
		PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total	
I. Investment Costs																	
A. Community organisation, planning and mentoring																	
1. Training of social facilitators	No	13	26	26	26	18	-	109	20,000	260,000	520,000	520,000	520,000	360,000	-	2,180,000	TRAININGS
2. Refresher training of social facilitators	No	-	-	13	26	26	26	91	20,000	-	-	260,000	520,000	520,000	520,000	1,820,000	TRAININGS
3. Training of FFS facilitators in NRM planning	No	5	3	3	-	-	-	11	15,000	75,000	45,000	45,000	-	-	-	165,000	TRAININGS
4. Preparation of natural resource management plans	No	10	40	50	50	-	-	150	7,000	70,000	280,000	350,000	350,000	-	-	1,050,000	CONSULTANCIES_1
5. In kind incentive to social mentoring champions	Ls									95,000	95,000	95,000	95,000	95,000	95,000	570,000	GOODS_SERVICES_&_INPUTS
6. Technical assistance																	
Social development expert	p-m	12	3	-	-	-	-	15	18,000	216,000	54,000	-	-	-	-	270,000	CONSULTANCIES_1
Community development experts (2)	p-m	16	24	24	24	24	-	112	8,000	128,000	192,000	192,000	192,000	192,000	-	896,000	CONSULTANCIES_1
Subtotal										344,000	246,000	192,000	192,000	192,000	-	1,166,000	
Subtotal										844,000	1,186,000	1,462,000	1,677,000	1,167,000	615,000	6,951,000	
B. Training of farmers and community members																	
1. Establishment of FFS (Uige/ Cuanza Norte)	No	332	664	664	664	581	-	2,905	500	166,000	332,000	332,000	332,000	290,500	-	1,452,500	MATCHING_GRANT_1
2. Establishment of FFS (Bongo/ Zaire)	No	-	68	136	136	136	119	595	500	-	34,000	68,000	68,000	68,000	59,500	297,500	MATCHING_GRANT_1
3. Establishment of FFS (in southern provinces)	No	-	300	300	300	300	300	1,500	500	-	150,000	150,000	150,000	150,000	150,000	750,000	MATCHING_GRANT_1
4. Training of master trainers/ a /a	No	4	3	-	-	-	-	7	40,000	160,000	120,000	-	-	-	-	280,000	TRAININGS
5. Training of FFS facilitators/ b /b	No	6	13	13	13	9	-	54	20,000	120,000	260,000	260,000	260,000	180,000	-	1,080,000	TRAININGS
6. Refresher training of FFS facilitators/ c /c	No	-	-	6	13	13	13	45	20,000	-	-	120,000	260,000	260,000	260,000	900,000	TRAININGS
Subtotal										446,000	896,000	930,000	1,070,000	948,500	469,500	4,760,000	
C. Support to FSS/FO's and household mentoring																	
1. Service provider contracts	Cluster per year	3	4	4	4	4	2	21	400,000	1,200,000	1,600,000	1,600,000	1,600,000	1,600,000	800,000	8,400,000	GOODS_SERVICES_&_INPUTS
2. Technical assitance																	
FFS Expert (2)	p-m	16	24	24	24	24	-	112	8,000	128,797	195,600	198,036	200,501	202,998	-	925,932	CONSULTANCIES_1
Farmer field school specialist	p-m	12	12	12	-	-	-	36	18,000	217,345	220,051	222,790	-	-	-	660,185	CONSULTANCIES_1
Subtotal										346,141	415,651	420,826	200,501	202,998	-	1,586,118	
Subtotal										1,546,141	2,015,651	2,020,826	1,800,501	1,802,998	800,000	9,986,118	
Total										2,836,141	4,097,651	4,412,826	4,547,501	3,918,498	1,884,500	21,697,118	

\a 20 persons for 3 months divided over 6 months
\b 20 persons for 14 days
\c 1 per municipality; 2 trainings over 6 years

Detailed Table 2.2: Investment in Family Farming

Angola
Smallholder Resilience Enhancement Project (SREP)
Table 2.2. Component 2: Family Farmer Strengthening and Investment: Investment in family f

Detailed Costs		Quantities							Unit Cost	Totals Including Contingencies (USD)							
	Unit	PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total	Expenditure Account
I. Investment Costs																	
A. Agriculture Diverstification and Improved Productivity																	
1. Agriculture production (Uige/ Cuanza Norte)	hh	-	400	6,600	6,600	6,600	5,000	25,200	100	-	40,000	660,000	660,000	660,000	500,000	2,520,000	MATCHING_GRANT_1
2. Agriculture production (Bengo/ Zaire)	hh	-	-	1,400	1,400	1,400	820	5,020	100	-	-	140,000	140,000	140,000	82,000	502,000	MATCHING_GRANT_1
3. Agriculture production packages (resillience areas)	hh	600	1,000	2,000	2,000	2,000	500	8,100	100	60,000	100,000	200,000	200,000	200,000	50,000	810,000	MATCHING_GRANT_1
4. Livestock activities (Uige/ Cuanza Norte)	hh	-	800	1,100	1,400	1,400	1,400	6,100	300	-	240,000	330,000	420,000	420,000	420,000	1,830,000	MATCHING_GRANT_1
5. Livestock activities (Bengo/ Zaire)	hh	-	-	400	600	600	600	2,200	300	-	-	120,000	180,000	180,000	180,000	660,000	MATCHING_GRANT_1
6. Livestock activities (resillience areas in the south)	hh	900	1,500	1,500	1,500	1,599	1,500	8,499	300	270,000	450,000	450,000	450,000	479,700	450,000	2,549,700	MATCHING_GRANT_1
7. Technical assistance																	
Aquaculture expert	p-m	-	2	-	-	-	-	2	8,000	-	16,000	-	-	-	-	16,000	CONSULTANCIES_1
Livestock officers (2)	p-m	24	24	24	24	24	-	120	4,000	96,000	96,000	96,000	96,000	96,000	-	480,000	CONSULTANCIES_1
Subtotal										96,000	112,000	96,000	96,000	96,000	-	496,000	
8. Contracts																	
Institute of agronomic research/ a /a	per year	2	2	2	2	-	-	8	100,000	200,000	200,000	200,000	200,000	-	-	800,000	GOODS_SERVICES_&_INPUTS
Subtotal										626,000	1,142,000	2,196,000	2,346,000	2,175,700	1,682,000	10,167,700	
B. Post-harvest Management and Value Addition (household level)																	
1. Market studies, designs and supervision	No	2	2	1	-	2	2	9	100,000	211,307	213,938	108,301	-	222,029	224,793	980,368	WORKS_1
2. Value chain/ market studies	Studies	1	-	-	-	-	-	1	200,000	201,241	-	-	-	-	-	201,241	GOODS_SERVICES_&_INPUTS
3. Post harvest activities (Uige/ Cuanza norte)	hh	-	500	900	900	700	600	3,600	300	-	152,803	278,457	281,911	221,984	192,633	1,127,788	GOODS_SERVICES_&_INPUTS
4. Post harvest activities (Bengo/ Zaire)	hh	-	-	300	400	400	400	1,500	300	-	-	92,819	125,294	126,848	128,422	473,383	GOODS_SERVICES_&_INPUTS
5. Post harvest activities (Cunene, Namibe, Benguela)	hh	15	150	200	200	200	200	965	300	4,528	45,841	61,879	62,647	63,424	64,211	302,530	GOODS_SERVICES_&_INPUTS
6. Technical assistance																	
Post harvest technologist	p-m	3	6	6	-	-	-	15	8,000	24,149	48,898	49,506	-	-	-	122,554	CONSULTANCIES_1
Marketing officer	p-m	-	24	24	24	24	-	96	8,000	-	195,594	198,024	200,485	202,976	-	797,079	CONSULTANCIES_1
Agriculture and marketing officer /b	p-m	-	-	-	-	-	6	6	8,000	-	-	-	-	-	51,375	51,375	CONSULTANCIES_1
Subtotal										24,149	244,492	247,530	200,485	202,976	51,375	971,007	
Subtotal										441,225	657,074	788,986	670,337	837,262	661,433	4,056,317	
C. Rural micro and small scale agri- business promotion																	
1. Service provider enterprises (Uige/ Cuanza Norte)	No	400	500	300	200	200	-	1,600	500	201,241	254,671	154,698	104,412	105,707	-	820,728	GOODS_SERVICES_&_INPUTS
2. Servicer provider enterprises (Bengo/ Zaire)	No	-	-	300	300	300	300	1,200	500	-	-	154,698	156,617	158,560	160,527	630,403	GOODS_SERVICES_&_INPUTS
3. Service provider services (Southern provinces)	No	-	200	300	-	-	-	500	500	-	101,868	154,698	-	-	-	256,567	GOODS_SERVICES_&_INPUTS
4. Service provider services (Southern provinces)	No	-	-	-	400	400	400	1,200	500	-	-	-	208,823	211,414	214,036	634,273	GOODS_SERVICES_&_INPUTS
Subtotal										201,241	356,540	464,095	469,852	475,681	374,564	2,341,971	
Total										1,268,465	2,155,613	3,449,081	3,486,189	3,488,643	2,717,997	16,565,988	

\a contractural supply of cassava cuttings, sorgum, millet, maize varieties of seed as well as pasture and fodder varieties
\b costs covered for first 5 years by SAMAP

Detailed Table 3.1: SREP Project Implementation Unit

Angola
Smallholder Resilience Enhancement Project (SREP)
Table 3.1. Component 3: Programme cordination: SREP project implementation unit

Detailed Costs		Quantities							Unit Cost	Totals Including Contingencies (USD)						
	Unit	PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total
I. Investment Costs																
A. Vehicles and equipment																
Vehicles	No	7	-	-	-	-	-	7	40,000	281,743.0	-	-	-	-	-	281,743.0
Computer sets	Sets	27	-	-	27	-	-	54	1,500	40,752.1	-	-	42,293.3	-	-	83,045.4
Printers/ photocopiers	Sets	8	-	-	-	-	-	8	2,500	20,124.5	-	-	-	-	-	20,124.5
Furniture sets	Sets	27	-	-	27	-	-	54	1,500	40,752.1	-	-	42,293.3	-	-	83,045.4
Subtotal										383,371.7	-	-	84,586.5	-	-	467,958.3
B. Monitoring and evaluation, studies, training and workshops																
1. Setting the M&E system																
Finalisation of project implementation manual	p-m	3	-	-	-	-	-	3	25,000	75,465.2	-	-	-	-	-	75,465.2
Preparation of M&E software	p-m	2	-	1	-	1	-	4	25,000	50,310.1	-	25,783.0	-	26,426.7	-	102,519.9
M&E training of project staff and implement	Workshop	3	-	-	-	-	-	3	15,000	45,279.1	-	-	-	-	-	45,279.1
Project supervision	mission	2	2	2	2	2	2	12	10,000	20,124.1	20,373.7	20,626.4	20,882.3	21,141.4	21,403.6	124,551.5
Subtotal										191,178.5	20,373.7	46,409.5	20,882.3	47,568.1	21,403.6	347,815.7
2. Surveys, studies and audit																
Baseline survey	survey	1	-	-	-	-	-	1	100,000	100,620.3	-	-	-	-	-	100,620.3
Project RIMS and census study	p-m	2	-	-	-	-	-	2	25,000	50,310.1	-	-	-	-	-	50,310.1
Study on women vulnability, youth and handcaped	p-m	1	-	-	-	-	-	1	100,000	100,620.3	-	-	-	-	-	100,620.3
Study and food and nutriation security status of HH	p-m	1	-	-	-	-	-	1	25,000	25,155.1	-	-	-	-	-	25,155.1
Backstocking missions	missions	1	1	1	1	1	1	6	30,000	30,186.1	30,560.5	30,939.6	31,323.5	31,712.1	32,105.5	186,827.2
Midterm review	ls	-	-	1	-	-	-	1	100,000	-	-	103,132.2	-	-	-	103,132.2
Project completion report	Ls	-	-	-	-	-	1	1	250,000	-	-	-	-	-	267,545.5	267,545.5
Audit report preparation	p-y	1	1	1	1	1	1	6	30,000	30,186.1	30,560.5	30,939.6	31,323.5	31,712.1	32,105.5	186,827.2
Subtotal										337,077.8	61,121.1	165,011.4	62,646.9	63,424.1	331,756.4	1,021,037.8
3. Workshops																
Regional start up workshops (North and southern region)	workshop	2	-	-	-	-	-	2	30,000	60,372.2	-	-	-	-	-	60,372.2
National start up workshops	workshop	1	-	-	-	-	-	1	40,000	40,248.1	-	-	-	-	-	40,248.1
Preparation of AWPB	Workshops	7	7	7	7	7	7	42	5,000	35,217.1	35,654.0	36,096.3	36,544.0	36,997.4	37,456.4	217,965.1
National consolidation	Workshops	2	2	2	2	2	2	12	10,000	20,124.1	20,373.7	20,626.4	20,882.3	21,141.4	21,403.6	124,551.5
Subtotal										155,961.4	56,027.6	56,722.7	57,426.4	58,138.8	58,860.0	443,136.8
Subtotal										684,217.7	137,522.4	268,143.6	140,955.6	169,130.9	412,020.1	1,811,990.3
Total Investment Costs										1,067,589.4	137,522.4	268,143.6	225,542.1	169,130.9	412,020.1	2,279,948.6

Detailed Table 3.1: SREP Project Implementation Unit…continued

Detailed Costs		Quantities							Unit Cost	Totals Including Contingencies (USD)						
	Unit	PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total
II. Recurrent Costs																
A. Recurrent Costs- SREP- PIU																
1. SREP PIU /a																
SREP Project Manager	p-m	12	12	12	12	12	12	72	8,000	96,000.0	96,000.0	96,000.0	96,000.0	96,000.0	96,000.0	576,000.0
Finance management officer	p-m	12	12	12	12	12	12	72	6,500	78,000.0	78,000.0	78,000.0	78,000.0	78,000.0	78,000.0	468,000.0
Finance specialist	p-m	12	12	12	12	12	12	72	5,000	60,000.0	60,000.0	60,000.0	60,000.0	60,000.0	60,000.0	360,000.0
Accountant	p-m	12	12	12	12	12	12	72	4,000	48,000.0	48,000.0	48,000.0	48,000.0	48,000.0	48,000.0	288,000.0
Procurement officer	person-months	12	12	12	12	12	12	72	7,000	84,000.0	84,000.0	84,000.0	84,000.0	84,000.0	84,000.0	504,000.0
M&E Officer (senior)	p-m	12	12	12	12	12	12	72	6,000	72,000.0	72,000.0	72,000.0	72,000.0	72,000.0	72,000.0	432,000.0
Administrative assistant	p-m	12	12	12	12	12	12	72	1,500	18,000.0	18,000.0	18,000.0	18,000.0	18,000.0	18,000.0	108,000.0
Driver	p-m	12	12	12	12	12	12	72	800	9,600.0	9,600.0	9,600.0	9,600.0	9,600.0	9,600.0	57,600.0
Subtotal										465,600.0	465,600.0	465,600.0	465,600.0	465,600.0	465,600.0	2,793,600.0
2. Provincial PIUs /b																
Team leaders (2) /c	p-m	24	24	24	24	24	24	144	7,000	168,000.0	168,000.0	168,000.0	168,000.0	168,000.0	168,000.0	1,008,000.0
Assistant finance officers (4)	p-m	48	48	48	48	48	48	288	3,000	144,000.0	144,000.0	144,000.0	144,000.0	144,000.0	144,000.0	864,000.0
Assistant procurement officers	p-m	48	48	48	48	48	48	288	3,000	144,000.0	144,000.0	144,000.0	144,000.0	144,000.0	144,000.0	864,000.0
M&E officers (2)	p-m	24	24	24	24	24	24	144	4,000	96,000.0	96,000.0	96,000.0	96,000.0	96,000.0	96,000.0	576,000.0
M&E assistants (3)	p-m	36	36	36	36	36	36	216	3,000	108,000.0	108,000.0	108,000.0	108,000.0	108,000.0	108,000.0	648,000.0
Area coordinators (7) /d	p-m	84	84	84	84	84	84	504	2,500	210,000.0	210,000.0	210,000.0	210,000.0	210,000.0	210,000.0	1,260,000.0
Adminstrative assistants (7)	p-m	84	84	84	84	84	84	504	1,000	84,000.0	84,000.0	84,000.0	84,000.0	84,000.0	84,000.0	504,000.0
Drivers (7)	p-m	84	84	84	84	84	84	504	800	67,200.0	67,200.0	67,200.0	67,200.0	67,200.0	67,200.0	403,200.0
Annual operation cost	P-Y	1	1	1	1	1	1	6	800,000	800,000.0	800,000.0	800,000.0	800,000.0	800,000.0	800,000.0	4,800,000.0
Subtotal										1,821,200.0	1,821,200.0	1,821,200.0	1,821,200.0	1,821,200.0	1,821,200.0	10,927,200.0
Total Recurrent Costs										2,286,800.0	2,286,800.0	2,286,800.0	2,286,800.0	2,286,800.0	2,286,800.0	13,720,800.0
Total										3,354,389.4	2,424,322.4	2,554,943.6	2,512,342.1	2,455,930.9	2,698,820.1	16,000,748.6

\a location in the SCU
\b 4 provincial project implementation units will be set up in Buanza, Uige, Benguela and Namibe and 3 sub- unit offices in Bengo, Cuanza norte and Cunene
\c One for each of the two regions- north and south. Designed to a selected provincial capital
\d One area Coordinator for each province

Detailed Table 3.2: Single Coordination Unit (SCU)- Portfolio Implementation Facility (PIF)

Angola
Smallholder Resilience Enhancement Project (SREP)
Table 3.2. Component 3: Programme cordination: Single cordination unit (SCU

Detailed Costs		Quantities							Unit Cost	Totals Including Contingencies (USD)						
	Unit	PY1	PY2	PY3	PY4	PY5	PY6	Total	(USD)	PY1	PY2	PY3	PY4	PY5	PY6	Total
I. Investment Costs																
A. Establishment of PIF /a																
Development support service specialist /b	p-m	4	2	-	-	-	-	6	18,000	72,447.3	36,673.8	-	-	-	-	109,121.2
Project management and M&E specialist	p-m	12	6	3	1	1	1	24	18,000	217,344.6	110,025.3	55,697.6	18,797.0	19,031.0	19,268.0	440,163.5
Financial management specialist	p-m	8	5	4	2	1	1	21	18,000	144,894.7	91,684.5	74,259.1	37,590.9	19,029.0	19,265.5	386,723.7
Procurement specialist	p-m	6	5	4	2	1	1	19	18,000	108,671.0	91,684.5	74,259.1	37,590.9	19,029.0	19,265.5	350,500.1
Subtotal										543,357.7	330,068.1	204,215.7	93,978.9	57,089.1	57,799.0	1,286,508.4
B. Training and internship																
SCU capacity building internships (Luanda based) /c	No	18	18	18	18	18	-	90	1,500	27,167.5	27,504.5	27,845.7	28,191.1	28,540.8	-	139,249.6
SCU capacity building (overseas based) /d	No	9	9	9	9	9	-	45	50,000	452,791.1	458,408.0	464,094.7	469,852.0	475,680.8	-	2,320,826.6
Subtotal										479,958.6	485,912.5	491,940.4	498,043.1	504,221.6	-	2,460,076.2
Total Investment Costs										1,023,316.3	815,980.6	696,156.1	592,022.0	561,310.7	57,799.0	3,746,584.6
II. Recurrent Costs																
A. Recurrent costs SCU /e																
Financial Controller	p-m	12	12	12	12	12	12	72	11,000	132,820.1	134,470.6	136,141.6	137,833.4	139,546.3	141,280.4	822,092.4
Senior Procurement Officer	p-m	12	12	12	12	12	12	72	11,000	132,818.7	134,466.4	136,134.4	137,823.2	139,533.0	141,264.0	822,039.8
Senior M&E specialist	p-m	12	12	12	12	12	-	60	10,000	120,744.3	122,242.1	123,758.6	125,293.9	126,848.2	-	618,887.1
Senior M&E specialist	p-m	-	-	-	-	-	12	12	10,000	-	-	-	-	-	128,421.8	128,421.8
Administrative assistant	p-m	12	12	12	12	12	12	72	1,500	18,111.6	18,336.3	18,563.8	18,794.1	19,027.2	19,263.3	112,096.3
Driver	p-m	12	12	12	12	12	12	72	800	9,659.5	9,779.4	9,900.7	10,023.5	10,147.9	10,273.7	59,784.7
Total Recurrent Costs										414,154.4	419,294.8	424,499.1	429,768.1	435,102.6	440,503.3	2,563,322.3
Total										1,437,470.6	1,235,275.4	1,120,655.2	1,021,790.1	996,413.3	498,302.3	6,309,906.9

\a SCU will be established by SAMAP and cofinanced between SAMAP and SREP
\b to be provided under UNDP funding. Will support MINAGRIF to develop ToR
\c Each year 18 interns (6-finance, 6-project management, 6-procurement) will be competitively hired to form the Luanda based internship programme
\d Each year 9 interns (3 project management, 3 finance, 3 procurement) will be selected to attend one year training abroad
\e SCU will be established by SAMAP and cofinanced between SAMAP and SREP

Appendix 10: Economic and Financial Analysis

1. This Appendix presents the economic and financial analyses Smallholder Resilience Enhancement Project (SREP) proposed for IFAD funding with co-financing from BADEA, AFD, the Government of Angola and a climate fund co-financier yet to be confirmed.

A. Project beneficiaries and benefits

2. SREP is planned for five categories of beneficiaries and benefits flow streams:

a) Benefits and beneficiaries exclusively from extension services using Farmer Field Schools (FFS) but *without* investment grants.
b) Benefits and beneficiaries from extension services through Farmer Field Schools (FFS) *plus* investment grants.
c) From field interviews, potential beneficiary farmers reported that with road construction or rehabilitation a premium price for farm produce is received. Without the community access roads sometimes even sales of products from crops such as the popular cassava in the target project area is very difficult or happens at about half the price. The target is that at least one-fourth of direct agricultural grant beneficiaries will receive a premium price attributable to project investment in community access roads.
d) Another cluster of benefits and beneficiaries will flow from the lined-up support of Income Generating Activities (IGAs) and service contracts in the higher end value chain activities.
e) There are some beneficiaries who will benefit from reduced transport costs/ efficiency gains out of the roads investments. In addition, benefits will flow from the training related to nutrition, climate resilience and gender which are difficult to quantify.

3. SREP is targeting to reach 218,000 households in the two sub-projects and others as follows.

Table 1: Target household beneficiaries

Activity benefits	*Households targeted and phasing in*							
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Farmer field school	hh	12,825	28,625	27,500	27,500	25,000	7,500	128,950
Normal extension rainfed	hh	-	1,766	3,100	4,000	5,000	5,000	18,866
Investments in agricultural production	hh	600	1400	10000	10000	10000	6320	38,320
No. of livestock activities	hh	900	2300	3000	3500	3599	3500	16,799
No. of post harvest enterprises	hh	15	650	1400	1500	1300	1200	6,065
No. of service provider enterprises	hh	0	1200	2200	2000	1800	1800	9,000
		1,515	5,550	16,600	17,000	16,699	12,820	70,184
TOTAL								218,000

B. Financial analysis

4. The financial analysis of SREP is based on 6 farm models, derived from 10 crop/ enterprise models. The purpose of these financial models is to assess whether the proposed improved technology packages are commercially viable and enable the targeted smallholders to generate sufficient additional income, to increase their food security and resilience to shocksand to raise their asset base and creditworthiness

Crop models

5. Ten (10) crop/ livestock models have been developed for the main crops cultivated by the targeted smallholders. These crops are as follows:

Table 2: Crop/ livestock models yield (Kgs/ha) and gross margins per ha (AoA)

Summary of crop/ enterprise models (AoA)

		Yields Kgs/ ha Without Project	Yields Kgs/ ha with Project	Gross margins Without Project (WOP)-AoA	Gross Margins With Project (WP)-AoA	Incremental Income	IRR	NPV @ 15.56 %-AOA	Benefit Cost Ratio
1	Cassava FFS plus Grants	15,000	27,000	224,613	341,428	116,815	23%	86,502	2.09
2	Cassava FFS only	14,000	26,000	205,488	334,157	128,669	34%	270,161	2.21
3	Beans FFS and Grants	450	810	45,847	118,776	72,928	21%	102,474	1.66
4	Beans FFS only	450	720	45,847	95,522	49,675	63%	188,412	1.84
5	Maize FFS plus grants	1,000	2,000	146,021	234,953	88,932	14%	57,379	1.74
6	Maize FFS only	1,000	1,900	134,708	205,054	70,346	23%	137,276	1.71
7	Sweet potatoes	10,000	19,000	130,163	221,790	91,627	46%	291,647	1.99
8	Irrigated Tomatoes	5,000	10,000	139,607	292,182	152,576	51%	523,859	1.63
9	Goats			118,277	141,003	22,726	44%	18,071	2.81
10	Poultry			130,364	170,003	39,638	33%	94,846	2.46

6. The respective crop patterns and farm sizes based on information collected from the targeted geographical areas are estimated as follows:

Table 3: Summary of farm sizes and respective crop/ enterprise mix

FFS ONLY

Bengo/ Zaire-FFS only

		Farm area		Incremental Household (HH) Income (AOA)																			
	Unit	WOP	WP	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Farm size:	ha	2	2.5																				
Cropping patterns:																							
Cassava- 65%	ha	0.65	1.625	(192,035)	(157,457)	69,286	146,974	185,821	221,274	221,274	221,274	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273
Beans-30%	ha	0.3	0.75	(44,619)	16,551	35,824	36,477	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130	37,130
Maize-5%	ha	0.05	0.125	(19,628)	(6,681)	9,278	9,222	9,076	9,020	9,297	9,297	9,297	9,297	9,297	9,297	9,297	9,297	9,297	9,297	9,297	9,297	9,297	9,297
Total Annual incremental income (AOA)				**(256,282)**	**(147,587)**	**114,389**	**192,673**	**232,026**	**267,424**	**267,701**	**267,701**	**267,700**	**267,700**	**267,700**	**267,700**	**267,700**	**267,700**	**267,700**	**267,700**	**267,700**	**267,700**	**267,700**	**267,700**

IRR	**40%**
NPV (AOA)	**1,364,777**

Financing Analysis (AoA)

	Unit		Y1	Y2	Y3	Y4	Total
Minimum cash flowneeded (can be called investme	AoA		256,282	493,167	-	-	
Expected Savings to be in Project			637,500	433,115	241,854		
Loan	AoA	70%	179,398	345,217	-	-	
Own savings	AoA	30%	76,885	147,950		-	
Investment loan	AoA		179,398	345,217	-	-	
Initial Savings Utilised to Repay Loan			127,500	43,312			
Repayment Period	years	2.00					
Grace Period	years	0.50					
Interest Rate	%	14.35%	25,743.54	49,538.59			

			Without Project	With Project 1	2	3	4	5	6	7	8	9	10
Long-term Loan													
Principal Repayments Loan 1	AoA	179,398		59,799	119,598	0							
Principal Repayments Loan 2	AoA	345,217			115,072	230,144							
Principal Repayments Loan 3	AoA	-				-	-						
Principal Repayments Loan 4	AoA	-					-	-					
Total Loan Interest Repayments	AoA	75,282		8,581	33,675	33,026	-	-					
Total Principal Loan Repayments	AoA	524,614		59,799	234,671	230,144	-	-					
Loan Outstanding	AoA			119,598	230,144	-	-	-					

Cash Flow Analysis

Items			Without Project	With Project 1	2	3	4	5	6	7	8	9	10
Inflow													
Any positive income from production	AoA			-	-	114,389	192,673	232,026	267,424	267,701	267,701	267,700	267,700
Loans	AoA			179,398	345,217		-	-	-	-	-	-	-
Beneficiary's Contribution	AoA			204,385	191,262	241,854	-	-	-	-	-	-	-
Contributory Grant													
Total Inflow				**383,782**	**536,478**	**356,243**	**192,673**	**232,026**	**267,424**	**267,701**	**267,701**	**267,700**	**267,700**
Outflow													
Production & Investment Costs	AoA			256,282	147,587	-	-	-	-	-	-	-	-
Repayment of Loans	AoA			59,799	234,671	230,144	-	-	-	-	-	-	-
Repayment of Interest on Loans	AoA			8,581	33,675	33,026	-	-	-	-	-	-	-
Total Outflow				**324,663**	**415,932**	**263,170**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net Cash flow	AoA			**59,120**	**120,546**	**93,072**	**192,673**	**232,026**	**267,424**	**267,701**	**267,701**	**267,700**	**267,700**
Incremental cash flow after financing & Savings				**59,120**	**120,546**	**93,072**	**192,673**	**232,026**	**267,424**	**267,701**	**267,701**	**267,700**	**267,700**

Uige/ Cuanza -FFS only		Farm area		Incremental Household (HH) Income (AOA)																				
	Unit	WOP	WP	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Farm size:	ha	2	2.5																				
Cropping patterns:																							
Cassava- 65%	ha	1.3	1.625	(192,035)	(157,457)	69,286	146,974	185,821	221,274	221,274	221,274	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273	221,273
Irrigated vegetable- 15%	ha	0.3	0.375	(72,246)	1,299	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216	57,216
Sweet potatoes- 10%	ha	0.2	0.25	(26,653)	(4,829)	17,844	23,429	23,168	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907	22,907
Beans- 10%	ha	0.2	0.25	(14,873)	5,517	11,941	12,159	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377	12,377
Total Annual incremental income (AOA)				**(305,808)**	**(155,470)**	**156,287**	**239,778**	**278,581**	**313,774**	**313,774**	**313,774**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**	**313,772**

IRR **42%**
NPV (AOA) **1,640,522**

Financing Analysis (AoA)

	Unit		Y1	Y2	Y3	Y4	Total
Minimum cash flowneeded (can be called investme	AoA		305,808	155,470	-	-	
Expected Savings to be in Project			637,500	450,133	133,412		
Loan	AoA	70%	214,065	108,828.77	-	-	
Own savings	AoA	30%	91,742	46,640.90		-	
Investment loan	AoA		214,065	108,829	-	-	
Initial Savings used to Repay Loan			95,625	**270,080**			
Repayment Period	years	2.00					
Grace Period	years	0.50					
Interest Rate	%	14.35%	30,718.39	15,616.93			

			Without	With Project								
			Project	1	2	3	4	5	6	7	8	9	10
Long-term Loan													
Principal Repayments Loan 1	AoA	214,065		71,355	142,710	0							
Principal Repayments Loan 2	AoA	108,829			36,276	72,553							
Principal Repayments Loan 3	AoA	-				-	-						
Principal Repayments Loan 4	AoA	-					-	-					
Total Loan Interest Repayments	AoA	46,335		10,239	25,685	10,411	-	-					
Total Principal Loan Repayments	AoA	322,894		71,355	178,987	72,553	-	-					
Loan Outstanding	AoA			142,710	72,553	-	-	-					

Cash Flow Analysis

Items			Without	With Project									
			Project	1	2	3	4	5	6	7	8	9	10
Inflow													
Any positive income from production	AoA			-	-	156,287	239,778	278,581	313,774	313,774	313,774	313,772	313,772
Loans	AoA			214,065	108,829		-	-	-	-	-	-	-
Beneficiary's Contribution	AoA			187,367	316,721	-	-	-	-	-	-	-	-
Contributory Grant													
Total Inflow				**401,433**	**425,549**	**156,287**	**239,778**	**278,581**	**313,774**	**313,774**	**313,774**	**313,772**	**313,772**
Outflow													
Production & Investment Costs	AoA			305,808	155,470	-	-	-	-	-	-	-	-
Repayment of Loans	AoA			71,355	178,987	72,553	-	-	-	-	-	-	-
Repayment of Interest on Loans	AoA			10,239	25,685	10,411	-	-	-	-			
Total Outflow				**387,402**	**360,141**	**82,964**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net Cash flow	AoA			**14,030**	**65,408**	**73,324**	**239,778**	**278,581**	**313,774**	**313,774**	**313,774**	**313,772**	**313,772**
Incremental cash flow after financing				**14,030**	**65,408**	**73,324**	**239,778**	**278,581**	**313,774**	**313,774**	**313,774**	**313,772**	**313,772**

Farm type 1 - drier areas (FFS only)

	Unit	Farm area WOP	Farm area WP	Incremental Household (HH) Income (AOA) PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Farm size:	ha	0.8	0.8																				
Cropping patterns:																							
Maize		0.4	0.4	(66,224)	(34,891)	(14,068)	16,033	35,753	35,573	36,461	36,461	36,461	36,461	36,461	36,461	36,461	36,461	36,461	36,461	36,461	36,461	36,461	36,461
Cassava			0.1	(15,412)	(8,662)	(4,400)	7,422	7,096	7,031	7,031	11,747	11,681	11,681	11,681	11,681	11,681	11,551	11,551	11,551	11,551	11,551	11,551	11,551
Beans																							
Goat keeping		0.4	0.3	(53,393)	213	12,570	28,905	31,821	57,575	75,002	52,765	41,892	45,826	49,760	53,694	57,628	63,326	63,326	63,326	63,326	63,326	63,326	63,326
Free range poultry keeping																							
Total Annual incremental income (AOA)				**(135,029)**	**(43,340)**	**(5,897)**	**52,361**	**74,670**	**100,178**	**118,493**	**100,973**	**90,034**	**93,968**	**97,902**	**101,836**	**105,770**	**111,337**	**111,337**	**111,337**	**111,337**	**111,337**	**111,337**	**111,337**
IRR	**30%**																						
NPV	**448,058**																						

Financing Analysis (AoA)

	Unit		Y1	Y2	Y3	Y4	Total
Minimum cash flowneeded (can be called investme	AoA		135,029	43,340	5,897	-	
Savings							
Expected Savings to be in Project			318,750	230,429	113,734	66,471	
Loan	AoA	70%	94,520.02	30,338.23	4,128.08	-	
Own savings	AoA	30%	40,508.58	13,002.10	1,769.18	-	
Investment loan	AoA		94,520	30,338	4,128	-	
Initial Savings Utilised to Repay Loan			47,813	103,693	45,494		
Repayment Period	years	2.00					
Grace Period	years	0.50					
Interest Rate	%	14.35%	13,563.62	4,353.54	846.26		

	Unit		Without Project	With Project 1	2	3	4	5	6	7	8	9	10
Long-term Loan													
Principal Repayments Loan 1	AoA	94,520		31,507	63,013	-							
Principal Repayments Loan 2	AoA	30,338			10,113	20,225							
Principal Repayments Loan 3	AoA	5,897.26				1,966	3,931.51						
Principal Repayments Loan 4	AoA	-					-	-					
Total Loan Interest Repayments	AoA	18,763		4,521	10,494	3,184	564.17	-					
Total Principal Loan Repayments	AoA	130,756		31,507	73,126	22,191	3,931.51	-					
Loan Outstanding	AoA			63,013	20,225	2,162.33	-	-					

Cash Flow Analysis

Items	Unit		Without Project	With Project 1	2	3	4	5 to 10	6	7	8	9	10
Inflow													
Any positive income from production	AoA			-	-	-	52,361	74,670	100,178	118,493	100,973	90,034	93,968
Loans	AoA			94,520	30,338		-	-	-	-	-	-	-
Beneficiary's Contribution	AoA			88,321	116,695	47,263	-	-	-	-	-	-	-
Contributory Grant													
Total Inflow				**182,841**	**147,033**	**47,263**	**52,361**	**74,670**	**100,178**	**118,493**	**100,973**	**90,034**	**93,968**
Outflow													
Production & Investment Costs	AoA			135,029	43,340	5,897	-	-	-	-	-	-	-
Repayment of Loans	AoA			31,507	73,126	22,191	3,932	-	-	-	-	-	-
Repayment of Interest on Loans	AoA			4,521	10,494	3,184	564	-	-	-			
Total Outflow				**171,056**	**126,960**	**31,273**	**4,496**	**-**	**-**	**-**	**-**	**-**	**-**
Net Cash flow	AoA			**11,785**	**20,073**	**15,990**	**47,865**	**74,670**	**100,178**	**118,493**	**100,973**	**90,034**	**93,968**
Incremental cash flow after financing				**11,785**	**20,073**	**15,990**	**47,865**	**74,670**	**100,178**	**118,493**	**100,973**	**90,034**	**93,968**

Farm type 2 - smallholder in wetter areas (FFS only)

		Farm area		Incremental Household (HH) Income (AOA)																			
	Unit	WOP	WP	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Farm size:	ha	1.5	1.5																				
Cropping patterns:																							
Maize		0.8	0.5	(82,779)	(43,614)	(17,584)	20,042	44,691	44,466	45,576	45,576	45,576	45,576	45,576	45,576	45,576	45,576	45,576	45,576	45,576	45,576	45,576	45,576
Cassava		0.2	0.3	(46,235)	(25,986)	(13,200)	22,267	21,288	21,092	21,092	35,240	35,044	35,044	35,044	35,044	35,044	34,653	34,653	34,653	34,653	34,653	34,653	34,653
Beans		0.2	0.3	(31,227)	(7,876)	(762)	3,782	16,891	22,031	22,031	22,031	22,031	22,031	22,031	22,031	22,031	22,031	22,031	22,031	22,031	22,031	22,031	22,031
Goat keeping		0.3	0.2	(35,596)	142	8,380	19,270	21,214	38,383	50,001	35,177	27,928	30,551	33,174	35,796	38,419	42,217	42,217	42,217	42,217	42,217	42,217	42,217
Free range poultry keeping			0.2	(12,639)	1,603	1,738	4,583	7,985	7,928	7,928	7,928	7,928	7,928	7,928	7,928	7,928	7,928	7,928	7,928	7,928	7,928	7,928	7,928
Total Annual incremental income (AOA)				**(208,475)**	**(75,731)**	**(21,428)**	**69,944**	**112,069**	**133,900**	**146,628**	**145,951**	**138,507**	**141,129**	**143,752**	**146,375**	**148,997**	**152,404**	**152,404**	**152,404**	**152,404**	**152,404**	**152,404**	**152,404**

IRR	**27%**						
NPV	**585,720**						
Financing Analysis (AoA)							
	Unit		Y1	Y2	Y3	Y4	Total
Minimum cash flowneeded (can be called investme	AoA		208,475	75,731		-	
Expected Loan to be in Project			318,750	256,207	105,384	-	
Loan	AoA	70%	145,932.56	53,011.70	-	-	
Own savings	AoA	30%	62,542.53	22,719.30		-	
Investment loan	AoA		145,933	53,012	-	-	
Initial Savings Utilised to Repay Loan			-	128,103.74	105,384		
Repayment Period	years	2.00					
Grace Period	years	0.50					
Interest Rate	%	14.35%	20,941.32	7,607.18			

			Without	With Project								
			Project	1	2	3	4	5	6	7	8	9	10
Long-term Loan													
Principal Repayments Loan 1	AoA	145,933		48,644	97,288	0							
Principal Repayments Loan 2	AoA	53,012			17,671	35,341							
Principal Repayments Loan 3	AoA	-				-	-						
Principal Repayments Loan 4	AoA	-					-	-					
Total Loan Interest Repayments	AoA	28,549		6,980	16,497	5,071	-	-					
Total Principal Loan Repayments	AoA	198,944		48,644	114,959	35,341	-	-					
Loan Outstanding	AoA			97,288	35,341	-	-	-					

Cash Flow Analysis

Items			Without	With Project									
			Project	1	2	3	4	5 to 10	6	7	8	9	10
Inflow													
Any positive income from production	AoA			-	-	-	69,944	112,069	133,900	146,628	145,951	138,507	141,129
Loans	AoA			145,933	53,012		-	-	-	-	-	-	-
Beneficiary's Contribution	AoA			62,543	150,823	105,384	-	-	-	-	-	-	-
Contributory Grant													
Total Inflow				**208,475**	**203,835**	**105,384**	**69,944**	**112,069**	**133,900**	**146,628**	**145,951**	**138,507**	**141,129**
Outflow													
Production & Investment Costs	AoA			82,779	43,614	-	-	-	-	-	-	-	-
Repayment of Loans	AoA			48,644	114,959	35,341	-	-	-	-	-	-	-
Repayment of Interest on Loans	AoA			6,980	16,497	5,071	-	-	-	-	-	-	-
Total Outflow				**138,404**	**175,069**	**40,413**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net Cash flow	AoA			**70,071**	**28,765**	**64,972**	**69,944**	**112,069**	**133,900**	**146,628**	**145,951**	**138,507**	**141,129**
Incremental cash flow after financing				**70,071**	**28,765**	**64,972**	**69,944**	**112,069**	**133,900**	**146,628**	**145,951**	**138,507**	**141,129**

Grants

Bengo/ Zaire-Grant		Farm area		Incremental Household (HH) Income (AOA)																			
	Unit	WOP	WP	PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Farm size:	ha	2	2.5																				
Cropping patterns:																							
Cassava- 65%	ha	0.65	1.4	(215,763)	(121,267)	(61,601)	103,914	99,345	98,431	98,431	164,455	163,541	163,541	163,541	163,541	163,541	161,713	161,713	161,713	161,713	161,713	161,713	161,713
Beans -30%	ha	0.3	0.66	(68,698)	(17,327)	(1,677)	8,320	37,161	48,467	48,467	48,467	48,467	48,467	48,467	48,467	48,467	48,467	48,467	48,467	48,467	48,467	48,467	48,467
Maize-5%	ha	0.05	0.11	(18,211)	(9,595)	(3,869)	4,409	9,832	9,782	10,027	10,027	10,027	10,027	10,027	10,027	10,027	10,027	10,027	10,027	10,027	10,027	10,027	10,027
Livestock			0.3	(26,697)	106	6,285	14,452	15,911	28,787	37,501	26,383	20,946	22,913	22,913	22,913	22,913	22,913	22,913	22,913	22,913	22,913	22,913	22,913
Total Annual incremental income (AOA)				**(329,369)**	**(148,083)**	**(60,862)**	**131,095**	**162,248**	**185,469**	**194,426**	**249,331**	**242,981**	**244,948**	**244,948**	**244,948**	**244,948**	**243,120**	**243,120**	**243,120**	**243,120**	**243,120**	**243,120**	**243,120**

IRR	**25%**
NPV	**897,648**

Financing Analysis (AoA)

	Unit		Y1	Y2	Y3	Y4	Total
Minimum cash flowneeded (can be called investme	AoA		329,369	148,083	60,862	-	
Expected Savings need to be in Project			637,500	538,689	224,920		
Loan	AoA	70%	230,559	103,658	42,603	-	
Own savings	AoA	30%	98,810.83	44,425		-	
Investment loan	AoA		230,559	103,658	42,603	-	
Initial Savings Utilised to Repay Loan			-	269,345	224,920		
Repayment Period	years	2.00					
Grace Period	years	0.50					
Interest Rate	%	14.35%	33,085.16	14,874.94			

			Without	With Project								
			Project	1	2	3	4	5	6	7	8	9	10
Long-term Loan													
Principal Repayments Loan 1	AoA	230,559		76,853	153,706	0							
Principal Repayments Loan 2	AoA	103,658			34,553	69,105							
Principal Repayments Loan 3	AoA	60,862				20,287.17	########						
Principal Repayments Loan 4	AoA	-					-	-					
Total Loan Interest Repayments	AoA	54,074		11,028	27,015	16,030	-	-					
Total Principal Loan Repayments	AoA	395,078		76,853	188,258	89,393	########	-					
Loan Outstanding	AoA			153,706	69,105	-	-	-					

Cash Flow Analysis

Items			Without	With Project								
			Project	1	2	3	4	5 to 10	6	7	8	9	10
Inflow													
Any positive income from production	AoA			-	-	-	131,095	162,248	185,469	194,426	249,331	242,981	244,948
Loans	AoA			230,559	103,658		-	-	-	-	-	-	-
Beneficiary's Contribution	AoA			98,811	313,769	267,523	-	-	-	-	-	-	-
Contributory Grant													
Total Inflow				**329,369**	**417,428**	**267,523**	**131,095**	**162,248**	**185,469**	**194,426**	**249,331**	**242,981**	**244,948**
Outflow													
Production & Investment Costs	AoA			68,698	17,327	-	-	-	-	-	-	-	-
Repayment of Loans	AoA			76,853	188,258	89,393	40,574	-	-	-	-	-	-
Repayment of Interest on Loans	AoA			11,028	27,015	16,030	-	-	-	-			
Total Outflow				**156,580**	**232,601**	**105,423**	**40,574**	**-**	**-**	**-**	**-**	**-**	**-**
Net Cash flow	AoA			**172,790**	**184,827**	**162,100**	**90,521**	**162,248**	**185,469**	**194,426**	**249,331**	**242,981**	**244,948**
Incremental cash flow after financing				**172,790**	**184,827**	**162,100**	**90,521**	**162,248**	**185,469**	**194,426**	**249,331**	**242,981**	**244,948**

Uige/ Cuanza Grant

	Unit	Farm area WOP	Farm area WP	Incremental Household (HH) Income (AOA) PY1	PY2	PY3	PY4	PY5	PY6	PY7	PY8	PY9	PY10	PY11	PY12	PY13	PY14	PY15	PY16	PY17	PY18	PY19	PY20
Farm size:	ha	2	2.5																				
Cropping patterns:																							
Cassava- 65%	ha	1.3	1.43	(220,386)	(123,866)	(62,921)	106,141	101,474	100,541	100,541	167,979	167,045	167,045	167,045	167,045	167,045	165,179	165,179	165,179	165,179	165,179	165,179	165,179
Irrigated vegetable- 15%	ha	0.3	0.33	(63,576)	1,143	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350	50,350
Sweet potatoes- 10%	ha	0.2	0.22	(23,455)	(4,250)	15,703	20,617	20,388	20,158	20,158	20,158	20,158	20,158	20,158	20,158	20,158	20,158	20,158	20,158	20,158	20,158	20,158	20,158
Beans- 10%	ha	0.7	0.22	(22,899)	(5,776)	(559)	2,773	12,387	16,156	16,156	16,156	16,156	16,156	16,156	16,156	16,156	16,156	16,156	16,156	16,156	16,156	16,156	16,156
Livestock			0.3	(26,697)	106	6,285	14,452	15,911	28,787	37,501	26,383	20,946	22,913	22,913	22,913	22,913	22,913	22,913	22,913	22,913	22,913	22,913	22,913
Total Annual incremental income (AOA)				**(357,014)**	**(132,641)**	**8,858**	**194,333**	**200,509**	**215,992**	**224,705**	**281,025**	**274,655**	**276,622**	**276,622**	**276,622**	**276,622**	**274,755**	**274,755**	**274,755**	**274,755**	**274,755**	**274,755**	**274,755**

IRR	**30%**
NPV	**3,889,888**

Financing Analysis (AoA)

	Unit		Y1	Y2	Y3	Y4	Total
Minimum cash flowneeded (can be called investme	AoA		357,014	132,641		-	
Expected Savings need to be in Project			318,750	211,646	34,139		
Loan	AoA	70%	249,909.77	92,849	-	-	
Own savings	AoA	30%	107,104.19	39,792		-	
Investment loan	AoA		249,910	92,849	-	-	
Initial Savings Utilised to Repay Loan			-	84,658	34,139		
Repayment Period	years	2.00					
Grace Period	years	0.50					
Interest Rate	%	14.35%	35,862	13,324			

	Unit		Without Project	With Project 1	2	3	4	5	6	7	8	9	10
Long-term Loan													
Principal Repayments Loan 1	AoA	249,910		83,303	166,607	0							
Principal Repayments Loan 2	AoA	92,849			30,950	61,899							
Principal Repayments Loan 3	AoA	-				-	-						
Principal Repayments Loan 4	AoA	-					-	-					
Total Loan Interest Repayments	AoA	49,186		11,954	28,349	8,883	-	-					
Total Principal Loan Repayments	AoA	342,759		83,303	197,556	61,899	-	-					
Loan Outstanding	AoA			166,607	61,899	-	-	-					

Cash Flow Analysis

Items	Unit		Without Project	With Project 1	2	3	4	5 to 10	6	7	8	9	10
Inflow													
Any positive income from production	AoA			-	-	8,858	194,333	200,509	215,992	224,705	281,025	274,655	276,622
Loans	AoA			249,910	92,849		-	-	-	-	-	-	-
Beneficiary's Contribution	AoA			107,104	124,451	34,139	-	-	-	-	-	-	-
Contributory Grant													
Total Inflow				**357,014**	**217,300**	**42,996**	**194,333**	**200,509**	**215,992**	**224,705**	**281,025**	**274,655**	**276,622**
Outflow													
Production & Investment Costs	AoA				-	-	-	-	-	-	-	-	-
Repayment of Loans	AoA			83,303	166,607	-	-	-	-	-	-	-	-
Repayment of Interest on Loans	AoA			11,954	30,950	-	-	-	-	-			
Total Outflow				**95,257**	**197,556**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Net Cash flow	AoA			**261,757**	**19,744**	**42,996**	**194,333**	**200,509**	**215,992**	**224,705**	**281,025**	**274,655**	**276,622**
Incremental cash flow after financing				**261,757**	**19,744**	**42,996**	**194,333**	**200,509**	**215,992**	**224,705**	**281,025**	**274,655**	**276,622**

OFF-FARM

Total benefits (AOA'Millions)

Norte	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20
PY1	(6)	(2.63)	0.98	3.41	3.93	4.42	4.50	5.00	4.95	4.96	4.96	4.96	4.96	4.95	4.95	4.95	4.95	4.95	4.95	4.95
PY2		(115)	(54)	20	70	81	91	93	103	102	102	102	102	102	102	102	102	102	102	102
PY3			(225)	(105)	39	136	157	177	180	200	198	199	199	199	199	198	198	198	198	198
PY4				(218)	(102)	38	133	153	172	175	195	192	193	193	193	193	192	192	192	192
PY5					(115)	(54)	20	70	81	91	93	103	102	102	102	102	102	102	102	102
PY6						(187)	(88)	33	114	131	147	150	167	165	165	165	165	165	165	165
Total SREP-IGAs and service contracts benefits (AOA) Million	(6)	(118)	(278)	(300)	(104)	19	318	530	654	704	739	751	767	765	766	765	764	764	763	763

IRR	33%
NPV	2,392

Financing Analysis (AoA)

	Unit		Y1	Y2	Y3	Y4	Year 5	Year 6
Minimum cash flow needed (can be called investment)	AoA		5,618	118,111	277,741	299,926	104,250	-
Expected Savings to be in Project			318,750	301,127	265,694	182,372	92,394	33,401
Loan	AoA	70%	3,932.69	82,677.56	194,418.62	209,948.00	72,975.30	
Own savings	AoA	30%	1,685	35,433.24	83,322.27	89,977.71	31,275	
Investment loan	AoA		3,933	82,678	194,419	209,948	72,975	
Initial Savings Utilised to Repay Loan			**15,938**	-	-	-	27,718	33,401
Repayment Period	years	2.00						
Grace Period	years	0.50						
Interest Rate	%	14.35%	564	11,864	27,899	30,127.54	10,472	-

			Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Long-term Loan													
Principal Repayments Loan 1	AoA	3,933		1,311	2,622								
Principal Repayments Loan 2	AoA	82,678			27,559	55,118							
Principal Repayments Loan 3	AoA	194,419				64,806	129,612						
Principal Repayments Loan 4	AoA	209,948					69,983	139,965					
Principa Repayment Loan 5	AoA	72,975						24,325	48,650				
Total Loan Interest Repayments	AoA	80,927		188	4,331	17,209	28,642	23,576	6,981	-	-	-	-
Total Principal Loan Repayments	AoA	563,952		1,311	30,181	119,925	199,595	164,290	48,650	-	-	-	-
Loan Outstanding	AoA			2,621.79	55,118	129,612	139,965	48,650		-			

Cash Flow Analysis

Items			Without Project	With Project									
				1	2	3	4	5	6	7	8	9	10
Inflow													
Any positive income from production	AoA			-	-					18,623	530,181	654,333	703,767
Loans	AoA			1,311	30,181	119,925	199,595.08	164,290.43	55,631.50	-	-	-	-
Beneficiary's Contribution	AoA			17,623	35,433	83,322	89,977.71	58,993.28	33,400.56	-	-	-	0
Contributory Grant													
Total Inflow				**18,934**	**65,614**	**203,247**	**289,573**	**223,284**	**89,032**	**18,623**	**530,181**	**654,333**	**703,767**
Outflow													
Production & Investment Costs	AoA			-		-	-	-	-	-	-	-	-
Repayment of Loans	AoA			1,311	30,181	119,925	199,595.08	164,290.43	48,650.20	-	-	-	-
Repayment of Interest on Loans	AoA			188	4,331	17,209	28,641.89	23,575.68	6,981.30	-			
Total Outflow				**1,499**	**34,512**	**137,134**	**228,236.98**	**187,866.11**	**55,631.50**	**-**	**-**	**-**	**-**
Net Cash flow	AoA			**17,435**	**31,102**	**66,113**	**61,336**	**35,418**	**33,401**	**18,623**	**530,181**	**654,333**	**703,767**
Incremental cash flow after financing & Savings				**17,435**	**31,102**	**66,113**	**61,336**	**35,418**	**33,401**	**18,623**	**530,181**	**654,333**	**703,767**

7. **In the "without project (WOP)" situation** targeted beneficiaries follow a traditional cropping pattern as indicated in table 3 above with the following characteristics.

a) use of locally or own produced seeds, seedlings and planting material;
b) no or limited use of fertiliser and pesticide,
c) some use of manure, however at inappropriate rates to maintain soil fertility as these smallholders generally have insufficient livestock.

8. **In the "with project (WP)" situation**: The smallholder will increase production by improving yields, cultivated area or both as with the estimates as indicated in table 3. Table 3 above shows a distinction between farmers who will benefit from FFS support and those who will receive both FFS support and investment grants. The project will be providing extension services through FFS, matching grants including irrigation and investments in infrastructure such as roads which will result in efficiency gains.

Financial analysis farm models

9. As indicated in table 3 above all crop/ livestock models have high IRRs, NPVs and benefit cost ratios. It is, therefore, not surprising that all the corresponding farm models also have high financial return estimates with FIRRs ranging from 25 to 40%. In the northern area, farm size range is from 2 to 2.5 ha. In southern area, the farm size range is from 0.8 for lesser rain fall areas to 1.5 for higher rainfall areas.

Table 4: Financial analysis of farm models

	Farm Sizes (ha)		Financial Results AoA	
	WOP	WP	IRR	NPV
Bengo/Zaire-FFS only	2	2.5	40%	1,364,777
UIGE/Cuanza Norte -FFS only	2	2.5	42%	1,640,522
Bengo/Zaire-FSS+Grant	2	2.5	25%	900,493
UIGE/Cuanza Norte -FFS +Grant	2	2.5	30%	1,168,715
Sul: Farm Type 1 - drier areas	0.8	0.8	30%	448,058
Sul: Farm Type 2 - w etter areas	1.5	1.5	27%	585,720
Off Farm			33%	2,391,594

Table 5: Financial performance of the farm models

		Farm models' net incremental benefits (in 'AOA Million)						
		Bengo/ Zaire FFS only	Uige/ Cuanza Norte FFS only	Bengo/ Zaire FFS +grants	Uige/ Cuanza Norte FFS + grants	Sul: Farm type 1 - drier areas	Sule: Farm type 2 - smallholder in wetter areas	Off-farm
	PY1	(256,282)	(305,808)	(329,369)	(357,014)	(135,029)	(208,475)	(5,618)
	PY2	(147,587)	(155,470)	(148,083)	(132,641)	(43,340)	(75,731)	(118,111)
	PY3	114,389	156,287	(60,862)	8,858	(5,897)	(21,428)	(277,741)
	PY4	192,673	239,778	131,095	194,333	52,361	69,944	(299,926)
	PY5	232,026	278,581	162,248	200,509	74,670	112,069	(104,250)
	PY6	267,424	313,774	185,469	215,992	100,178	133,900	18,623
	PY7	267,701	313,774	194,426	224,705	118,493	146,628	317,893
	PY8	267,701	313,774	249,331	281,025	100,973	145,951	530,181
	PY9	267,700	313,772	242,981	274,655	90,034	138,507	654,333
	PY10	267,700	313,772	244,948	276,622	93,968	141,129	703,767
	PY11	267,700	313,772	244,948	276,622	97,902	143,752	739,360
	PY12	267,700	313,772	244,948	276,622	101,836	146,375	750,822
	PY13	267,700	313,772	244,948	276,622	105,770	148,997	767,017
	PY14	267,700	313,772	244,948	276,622	111,337	152,404	765,456
	PY15	267,700	313,772	244,948	276,622	111,337	152,404	765,704
	PY16	267,700	313,772	244,948	276,622	111,337	152,404	765,040
	PY17	267,700	313,772	244,948	276,622	111,337	152,404	764,393
	PY18	267,700	313,772	244,948	276,622	111,337	152,404	764,051
	PY19	267,700	313,772	244,948	276,622	111,337	152,404	763,497
	PY20	267,700	313,772	244,948	276,622	111,337	152,404	763,497
IRR		40%	42%	25%	30%	30%	27%	33%
NPV (USD'000)		5,835	7,013	3,850	4,996	1,916	2,504	10,224
FIRR'000 (@ 9.35%)		1,364,777	1,640,522	900,493	1,168,715	448,058	585,720	2,391,594

D. Project costs and indicators of the logical framework

10. Table 6 below summarises the project costs and indicators of the logical framework. The average cost per beneficiary of SREP, is approximately US$ 683 per household and USD 137 per person.

Table 6: Project costs and number of benefitting households

PROGRAM					
TOTAL PROGRAMME COSTS (in million USD)			149	**Base costs**	142
Beneficiaries	**1,090,000**	people	218,000	**Households**	
Cost per beneficiary	**137**	USD x person		683	USD x HH

E. Economic analysis

11. The economic cost-benefit analysis aims to assess the economic viability of the proposed project from the overall national economic standpoint. The analysis was conducted over a 20-year period in constant 2018 prices, aggregating additional benefits as derived from the various models developed in the financial analysis. Financial prices were converted to economic prices except where

Conversion Factor (CF=1) was justified. Economic costs were generated by COSTAB software. Incremental costs after the Project implementation period, in particular for maintenance of irrigation schemes and other infrastructure, as well as costs to follow up farmers were taken into account. An adoption rate of improved technologies of 70% has been used for FFS beneficiaries.

Table 7: Conversion Factors: Financial prices to Economic prices

Item	***Financial price***	***Conversion Factor***	***Economic Price***
Labour	*405*	*0.80*	*324*
Skilled Labour	*2112*[71]	*0.9*	*1690*
Maize (improved seeds)	*300*	*0.9*	*270*
Beans	*680*	*0.8*	*544*

12. ***Weighted Average Cost of Capital (Discount rate)***. A discount rate of 9.35% has been used based on the following source and derivation[72]

Aggregation and sequencing of implementation

13. The following table presents the phasing of implementation with the number of households to be reached by year.

Table 8: Aggregation of beneficiaries (# of households)

D)	**BENEFICIARIES AND PHASING**							
		PY1	**PY2**	**PY3**	**PY4**	**PY5**	**PY6**	**Total**
FFS only	hh	12,825	30,391	30,600	31,500	30,000	12,500	147,816
Grants	hh	1500	3700	13000	13500	13599	9820	55,119
Off-farm								
No. of post harvest enterprises	hh	15	650	1400	1500	1300	1200	6,065
No. of service provider enterprises	hh	0	1200	2200	2000	1800	1800	9,000
Sub-total		*15*	*1,850*	*3,600*	*3,500*	*3,100*	*3,000*	*15,065*
TOTAL		**14,340**	**35,941**	**47,200**	**48,500**	**46,699**	**25,320**	**218,000**

Results of the economic analysis

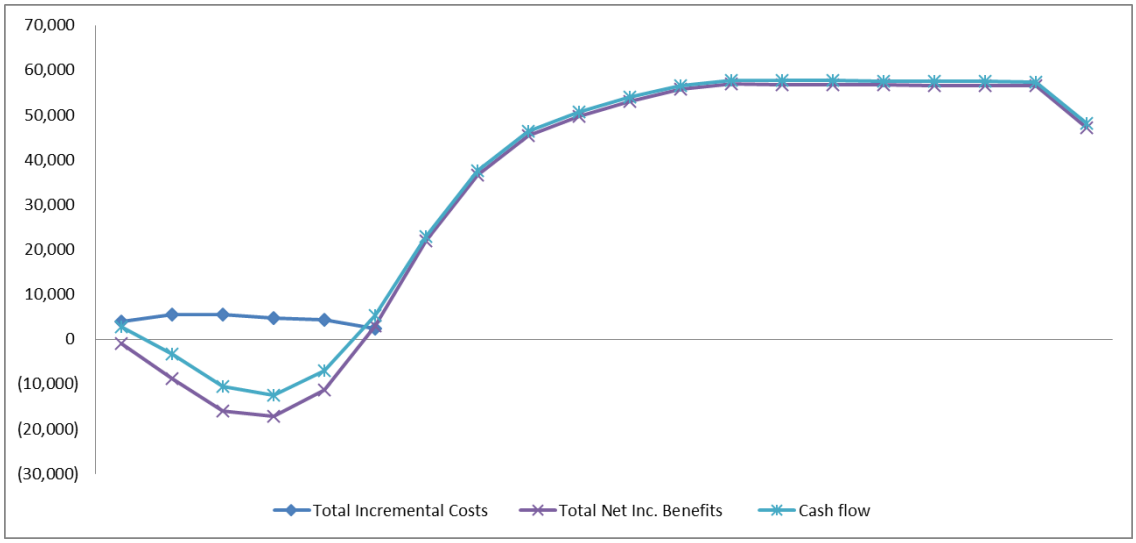
14. The Project would yield an Economic Internal Rate of Return (EIRR) of 26% and an Economic Net Present Value (ENPV) of US$91.66.8million (at 21% discount rate). The Project is, therefore, highly profitable from an economic standpoint.

[71] https://tradingeconomics.com/angola/minimum-wages
[72] Reference: http://cbonds.com/emissions/issue/428653

Project year	NET INCREMENTAL BENEFITS				COSTS			Cash flow
	FFS only	Grants	Off-farm	Total Net Inc. Benefits	Economic Costs ('Million AOA)	Economic O&M Costs * ('Million AOA)	Total Incremental Costs	
PY1	(2,904)	(4,921)	(6)	*(7,831)*	3,866		*3,866*	**(11,697)**
PY2	(8,234)	(14,347)	(118)	*(22,699)*	5,529		*5,529*	**(28,228)**
PY3	(9,355)	(21,616)	(278)	*(31,249)*	5,569		*5,569*	**(36,818)**
PY4	(6,733)	(21,871)	(300)	*(28,904)*	4,680		*4,680*	**(33,585)**
PY5	(1,804)	(15,612)	(104)	*(17,521)*	4,336		*4,336*	**(21,856)**
PY6	8,077	572	19	*8,667*	2,363		*2,363*	**6,304**
PY7	19,118	21,904	318	*41,340*		917	*917*	**40,423**
PY8	25,738	36,546	530	*62,814*		917	*917*	**61,898**
PY9	28,752	45,459	654	*74,865*		917	*917*	**73,949**
PY10	30,070	49,689	704	*80,463*		917	*917*	**79,546**
PY11	30,461	53,059	739	*84,259*		917	*917*	**83,342**
PY12	30,398	55,664	751	*86,813*		917	*917*	**85,897**
PY13	30,376	56,871	767	*88,014*		917	*917*	**87,097**
PY14	30,548	56,775	767	*88,090*		917	*917*	**87,174**
PY15	30,788	56,758	767	*88,313*		917	*917*	**87,397**
PY16	30,978	56,671	767	*88,416*		917	*917*	**87,499**
PY17	31,118	56,581	767	*88,467*		917	*917*	**87,550**
PY18	31,206	56,495	767	*88,468*		917	*917*	**87,552**
PY19	31,234	56,448	767	*88,450*		917	*917*	**87,533**
PY20	31,234	47,142	767	*79,143*		917	*917*	**78,226**
NPV@ 20.94 %('AOA million)		**29,217**						
NPV@ 20.94 %('000 USD)		**91,660**						
EIRR		**26%**						

15. The graphs below depicts and compares over time the Project's net benefits and incremental costs alongside the Project cash flow

Figure 9: Economic Cash Flow of the Project



16. The EIRR and NPV were subjected to sensitivity analysis in order to measure variations due to unforeseen factors. Variations include: 10, 20 and 50% cost over-run; 10 and 20% increase in benefits; 10 to 50% benefit decrease; and 1 to 2 years of delay in the implementation. The analysis indicates a relatively strong resilience to limited increases of costs and reductions of benefits as well as benefit delays. A summary of the sensitivity analysis is presented in Table 25 below.

Table 9: Results of Sensitivity Analysis

SENSITIVITY ANALYSIS (SA)			
	EIRR	**NPV**	
base scenario	26.07%	91,660	
costs +10%	25.66%	84,991	Economy does not fully recover or stabilize
costs +20%	25.21%	77,244	Economy does not fully recover or stabilize
costs +50%	23.30%	41,581	Economy does not fully recover or stabilize
benefits +10%	26.39%	106,153	Economy grows faster than expected
benefits +20%	26.67%	120,833	Economy grows faster than expected
benefits -10%	25.69%	77,292	Implementation capacity does not improve as fast as expected
benefits -20%	25.24%	63,009	Implementation capacity does not improve as fast as expected
benefits -50%	23.03%	6,509	Implementation capacity does not improve as fast as expected
benefits delayed 1 yr	25.55%	82,996	Delayed in getting positive benefits due to slow Economy
benefits delayed 2 yrs	23.62%	48,843	Delays in getting positive benefits due to slow Economy

Appendix 11: Draft Project Implementation Manual

The draft of the PIM is in the process of preparation and will be ready before the start of implementation but the outline is described below.

1. The Project Implementation Manual (PIM) describes the modalities and procedures to be used for implementation of the Smallholder Resilience Enhancement Project (SREP). The Manual provides a checklist of procedures and tasks to be executed during routine loan administration and project implementation activities. In particular, the PIM clarifies procedures and requirements regarding, project implementation, loan administration and flow of funds, reporting, accounting and participatory implementation procedures. The PIM aims to provide the project management and implementing partners with procedural guidance to implement the Project. The PIM is intended to be a functional document to be adapted and amended as necessary to incorporate the lessons learned from implementation experience.

13. The PIM presents a general description of the project planning design, project costs, benefits and sustainability, its implementing partners, organisational arrangement, staffing, and their responsibilities. The PIM will cover the implementation guidelines and procedures for implementation of each project component and preparation of annual work plan & budget and procurement planning, reporting, monitoring and evaluation and supervision.

14. Preparation and submittal of the draft Project Implementation Manual (PIM) for IFAD review and "No Objection" is a key condition for the project to enter-into-force. While the Project Coordination Committee (PCC) will adopt the PIM substantially in the form approved by IFAD, it does not replace the definitive Project Documents. Where there are inconsistencies with any provision of the Financing Agreement, the provision of the Agreement shall govern.

TABLE OF CONTENTS[73]

[73] Draft PIM will be prepared and included as a separate document.

D. Knowledge Management
E. Supervision
F. Risk identification and mitigation

V. FINANCIAL MANAGEMENT AND ACCOUNTING MODULE

A. Purpose of Financial Management Manual
B. Roles and responsibilities of key actors in financial management of ARP
C. General Institutional Set-Up and Governing Regulations
D. Types of Accounts, Special Account and Project Accounts
E. IFAD Disbursement Procedures
F. Check List for Withdrawal Applications
G. Annual Financial Statements
H. Designated Account Reconciliation Statement
I. Project Completion
J. Financial management team responsibilities in procurement
K. Treasury management
L. Accounting software and chart of accounts
M. Financial reporting and management accounting
N. Audit arrangements (Internal and External)
O. Funds flow – including management of withdrawal applications
P. Other internal controls

VI. PROCUREMENT MANAGEMENT

A. Purpose of Procurement Management Manual
B. General Conditions of Procurement
C. Procurement Procedures
D. Procurement Committees
E. Procurement Methods
F. Review of Procurement Decisions
G. Guidelines for Evaluation of Bids
H. Bid Evaluation Summary Checklist
I. Procurement Method: Goods and Work
J. Procurement Method: Services
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L. Review of Procurement Decisions
M. Grievance/complaint redressal system

VII. MANAGEMENT INFORMATION SYSTEMS…

A. Introduction
B. Approach
C. Measuring results
D. ARP Monitoring Indicators
E. Learning
F. Impact Measurement
G. Assessing RIMS Indicators
H. ARP Management Information System
I. Logical Framework Planning
J. Establishing Participatory MIS
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VIII. RESULT-ORIENTED ANNUAL WORK PLAN & BUDGET

A. Introduction
B. Model Format for AWP&B
C. Pointers for Preparation of AWP&B
D. AWP&B
E. Result-oriented AWP&B
F. Procurement Plan

G. Training Schedule
H. Staff Deployment

Appendix 12: IFAD policies and SECAP Review Note

Compliance with IFAD policies

OVERVIEW

1. This Annex elaborates on IFAD's relevant policies and strategy documents and procedures applicable to the SREP, which include environment and natural resources, climate change, targeting, gender, land, knowledge management and the Social Environment and Climate Assessment Procedures (SECAP). The compliance with the policies and strategies is summarised in the table below while the SECAP is addressed in the Review Note that is included as a separate document.

RELEVANT IFAD POLICIES AND STRATEGIES

2. The SREP aims to increase production and resilience of farm households and therefore contribute to improved food and nutrition security in rural households. These aims will be achieved through strengthening of institutional and smallholder capacities to produce for the markets and respond to climate change. The response to climate change focuses on building the resilience of smallholders using ecosystems based adaptation measures particularly under SREP SuI activities that include sustainable land and water management. The Project activities will also address land degradation by promoting soil and water conservation measures. These objectives also follow the principles of the related IFAD policies and strategy priorities as summarised below:

Policy	Project Response
Environment and Natural Resources Management	SREP applies several of the core principles of IFAD's policy on Environment and NRM. The agricultural production investments in the northern provinces will scale-up the multiple-benefit approaches for sustainable agricultural that have already been introduced under MOSAP I and are also planned under the SAMAP. In the south SREP will promote 'Climate-smart' approaches such as sustainable land and water management practices to build the resilience of the target smallholder farmers. SREP pays greater attention to risk and resilience through the criteria for selecting target beneficiaries in order to manage environment- and natural-resource-related shocks and thus maintain or enhance their agricultural productivity. The capacity building targeted at smallholders through the FFS and strengthening of Farmer Based Organisations is expected to result in improved governance of natural assets for poor rural people by community-led empowerment. SREP also focuses on livelihood diversification to reduce vulnerability and build resilience for sustainable natural resource management. SREP will also increase access by poor rural communities to environment and climate finance by targeting resources from the Green Climate Fund or Adaptation Fund. The Environment and Natural Resources risk management approach for the SREP is further elaborated in the SECAP Review Note.
Targeting and Gender	SREP adheres to IFAD's targeting policy by using the criteria of food insecurity in the approach adopted, which also extends to poverty and vulnerability to climate change. SREP's targeting strategy includes geographic and direct targeting as well as enabling, empowerment and capacity building measures. SREP also adheres to the three strategic objectives of IFAD's Gender Policy. Through the investments in agricultural production and livelihoods diversification it promotes economic empowerment to enable rural women and men to participate in and benefit from profitable economic activities. The institutional strengthening and capacity building of Farmer Based Organisations and the FFS approach is also expected to enable women and men to have equal voice and influence in rural institutions and organizations. Specific labour saving technologies that SREP will promote and the livelihoods diversification targeted at women and youth will also contribute to achieving a more equitable balance in workloads and in the sharing of economic and social benefits between women and men. SREP's targeting and gender approach is elaborated in Appendix II.

Climate Change Strategy	SREP's development objective includes building the resilience to climate change of smallholder farmers and also strengthening institutions to respond to climate change. It is therefore fully aligned with purpose 1of IFAD's climate change strategy. The inclusion of climate finance ensures that SREP is also aligned with purpose 2 of the Strategy to support smallholders to take advantage of available funding. Though the focus is on climate change adaptation the SREP investments in improved agricultural practices will also provide mitigation co-benefits. The climate change risks and the management proposed is further elaborated in the SECAP Review Note.
Land	SREP will not directly address land tenure in its activities. However it is aligned to IFAD's land policy and recognize the plurality of the forms of access to and control over, land in Angola. Most of the SREP activities will be implemented through Provincial Directorates and Municipal authorities where access to the land resources is determined. As such the access to land for the smallholders that are target beneficiaries is not expected to be an issue. SREP will also adhere to the 'do no harm' principle with regards to the land tenure interests of the rural poor, especially those of women, tribal peoples and other vulnerable groups. The Provincial Governance Committees that include traditional leaders and other key stakeholders are part of the grievance mechanisms incorporated in SREP to avoid elite capture or forced displacement of people, and to address conflicting claims. The capacity building for the Farmer Groups and Organisation will contribute to the empowerment of community representatives, which is a pre-requisite for their sustainable access to land resources. In addition any infrastructure development will apply the principle of free prior and informed consent.
Knowledge Management	SREP will contribute to the learning on thematic areas such as resilience building for smallholder farmers. Though this may be context specific the Project provides opportunities for capturing the learning on these themes for areas with similar agro-ecological zones and also for application in future interventions. The knowledge management approach and the monitoring and evaluation of the SREP are elaborated in Appendix 6.
Sexual Harassment/ Sexual Exploitation and Abuse	IFAD prioritises no tolerance for Sexual Harassment/Sexual Exploitation and Abuse in its supported operations. IFAD's SEA policy requires that appropriate precautionary and remedial measures to identify/receive/remedy/report (proportionate to level of risk) any occurrences of potential SH/SEA risks/complaints are in place. For more information, visit the IFAD webpage: https://www.ifad.org/web/guest/document-detail/asset/40738506.

SECAP REVIEW NOTE

Procedures Review Note

3. **Major landscape characteristics and Issues** - The S**mallholder Resilience Enhancement Project (SREP)**will intervene in seven provinces; three in the south (Cunene, Namibe and Benguela, which is central) and four in the north of Angola (Bengo, Kwanza Norte, Uige and Zaire). The farming system zones that will be covered by SREP from south to north are: agro-pastoral, cereals and cassava based, maize based, and a mixed cassava and plantation crop system that includes coffee.

4. The southern province of Cunene is generally lowland with mixed crop livestock farming while Namibe is characterised by desert and savannah forest vegetation. In Benguela, the main dominant crops are maize and sorghum. The northern provinces of Zaire, Uige, Bengo and Kwanza Nortelie at a lower altitude, forming a line of dry forest of tangled bush to high humid tropical forest.

5. The southern provinces were severely affected by recurrent droughts during the recent El-Nino event. Although the El Nino Southern Oscillation (ENSO) is a natural cycle, climate change and the mismanagement of natural resources, is progressively causing the impacts of the oscillation to intensify and to increase in frequency. Each iteration exacerbates Southern Africa's vulnerability to future disasters and depletes both the environment and the social systems that depend on it (Response Plan for the El Niño-Induced Drought in Southern Africa, 2016). Like in the southern provinces, the northern provinces are facing an increase of mean temperatures and changes in rain patterns, including early dry season and more frequent heavy rains.

6. The affected agro-ecological zones in southern Angola are mainly arid, semi-arid and sub-humid while the northern intervention areas are included in the sub-humid and humid agro-ecological zones (see Figure 10).

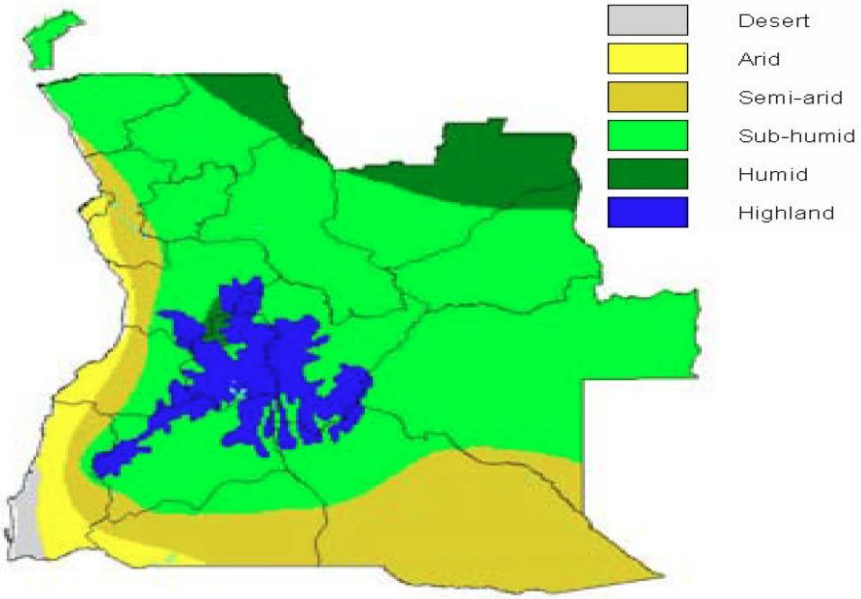


Figure 10 Agro-ecological zones of Angola, Source: FAO 2005

7. Angola's climate is tropical, hot and humid, with a longer hot and wet season (September to April) and a shorter cool and dry season (May to August). Short dry spells, usually lasting about two weeks, are common during the hot and wet season. The mean temperature in Angola is between 25ºC and 33ºC in the rainy season and between 18ºC and 22ºC during the dry season. The size, topographic, geologic, geomorphological, hydrologic, and ecological diversity influences the main climatic features of Angola (Figs 11&12).

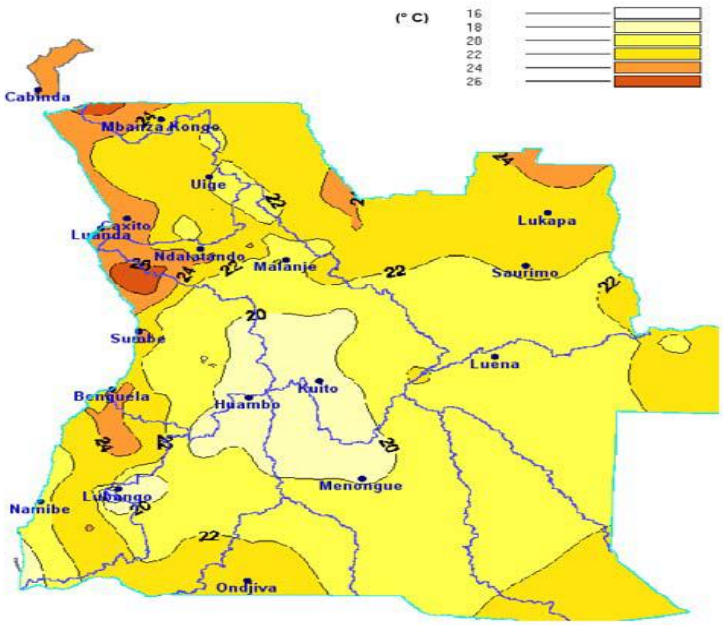


Figure 11– Mean Annual Temperature Isoclines (Source: MADRP, 2010)

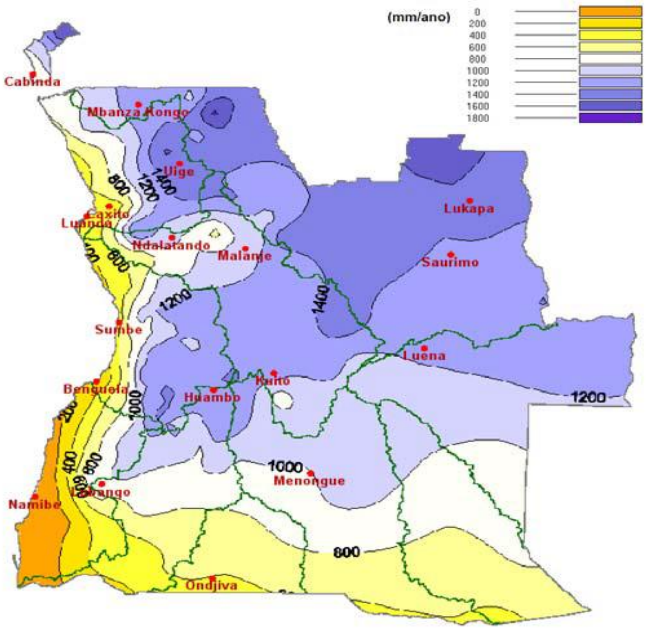


Figure 12– Mean Annual Rainfall Isoclines (Source: MADRP, 2010)

8. Mean annual temperature and precipitation variability in the different regions of the country illustrate these conditions leading to the occurrence of 5 climate types according with Koppen-Geiger System (Fig. 13).

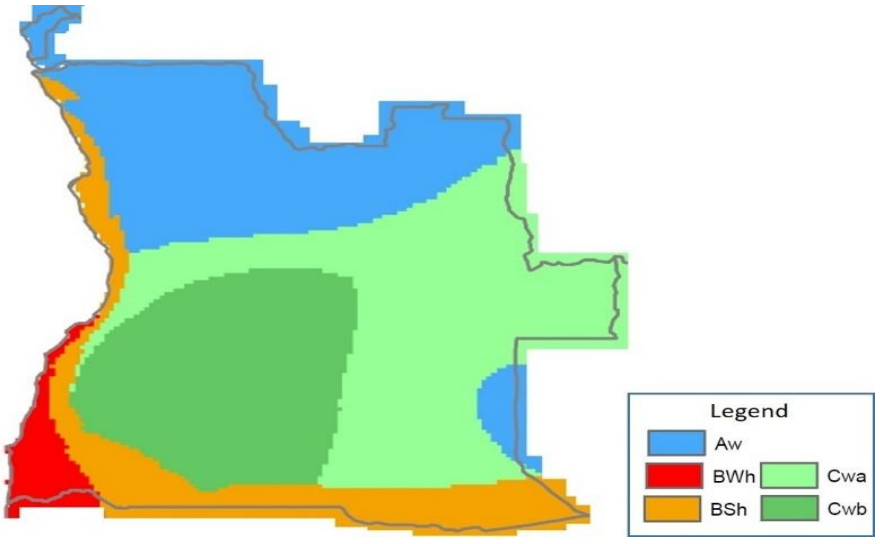


Figure 14–Koppen-Geiger climate type map of Angola (Adapted from Peel et al., 2007)

9. Angola faces a climate risk profile characterized by intermittent shortage and/or excess of water, with droughts and floods affecting the whole country and in particular the most vulnerable

communities. The Inter-Tropical Convergence Zone (ITCZ), the Botswana Upper High and the El Niño phenomenon (UNEP, 2006) are reported as the main factors determining rainfall patterns in Angola with several extreme events reported during the last 35 years including 8 droughts. Climate projections for Angola vary based on differences between models and assumptions about future greenhouse gas emissions. Without significant emission reductions mandated by regulatory or policy changes, the climate changing scenarios for Angola are (McSweeney et al., 2008):

- Median temperature projections for the 2090s fall between 2.3°C and 4.5°C higher than the 1970-1999 average;
- Most climate models project average temperature increase of more than 1°C by the 2030s compared to the 1970-1999 mean; the projected rate of warming is faster in the continental interior and eastern regions of Angola, and slower in the western, more coastal areas;
- Extremely hot days will become two to four times more frequent by the 2060s.

10. Like for temperature, changes in precipitation will not occur uniformly throughout the country since topography, geomorphology and land cover have a direct influence. Also, the frequency and intensity of high-precipitation events is likely to increase with increasing temperature, elevating the risk of flooding and other damaging events such as landslides. Associated with an increased risk of extreme precipitation is an increase in the risk of land drying and drought; since warming accelerates land surface drying while also increasing the water holding capacity of the atmosphere, the result is more intense and heavy episodic rainfall events interspersed with earlier and longer relatively dry periods. The southern project target zones are located in the lower rainfall region where the main livelihoods are centred on agricultural systems including livestock, maize, sorghum, millet and cassava. The northern zones are located in the sub humid region with some diversity of agriculture production, including, among others, cassava, beans, peanuts, banana, maize, coffee, fruits and vegetables (see Figure 15)

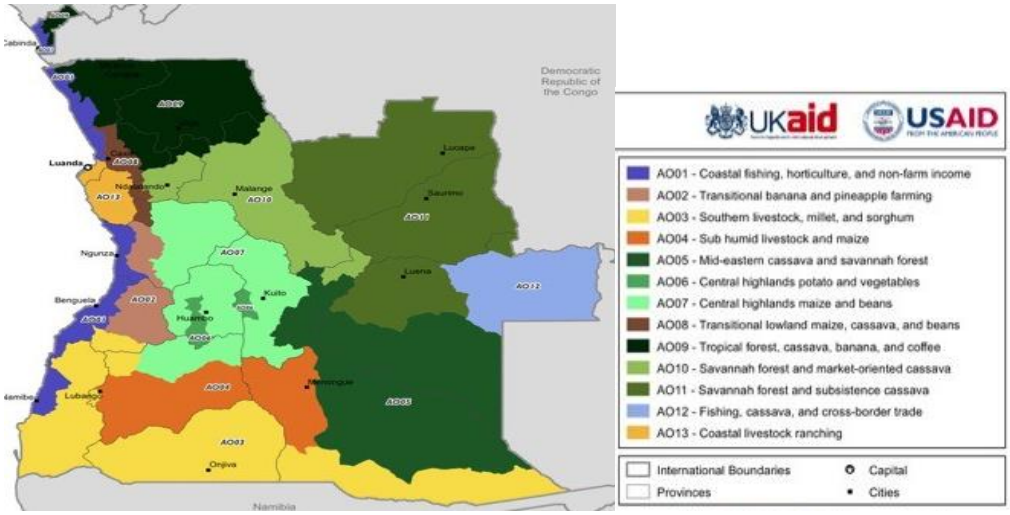


Figure 15. Livelihood zones of Angola, Source: FEWSNET

11. Recurrent cycles of droughts and floods have affected the southern provinces of Angola over the last decade while in the northern provinces extreme heavy rain is damaging crops and disturbing life conditions, including house and infrastructure damages. In the south, consecutive drought years have stretched household coping mechanisms to their limits. Most rural communities have lost their seeds and food stocks and as a result their vulnerability, to climate shocks has increased. The most recent El Niño drought (2015-2016) led to harvest failures with anticipated crop losses of up to 40% in parts of the south. In 2017, approximately 1.25 million people were food insecure most of these were located in southern provinces of Benguela, Cuando Cubango, Cunene, Huila, Kwanza Sul, and Namibe. Malnutrition has been exacerbated by the poor harvest with increasing number of children below the age of five in need of treatment for severe and acute malnutrition. An increasing number of

infants and children under age five are exposed to preventable diseases and common childhood illnesses such as malaria, diarrhoea, cholera and pneumonia. The drought and resultant waterborne diseases caused the death of an estimated 500,000 livestock. In Cunene province an outbreak of foot-and-mouth disease restricted cattle sales for over a year (Response Plan for the El Niño-Induced Drought in Southern Africa, 2016). In the northern province loss of crops is reported due to early dry season and disturbance of infrastructures and soil erosion due to increased occurrence of intense rainfall events. During the last decade there was a significant increase of the number of people affected by extreme events with a consequent increase on economic loss. Fig. 16 (CNPC, 2016) shows the recurrent effects in six provinces.

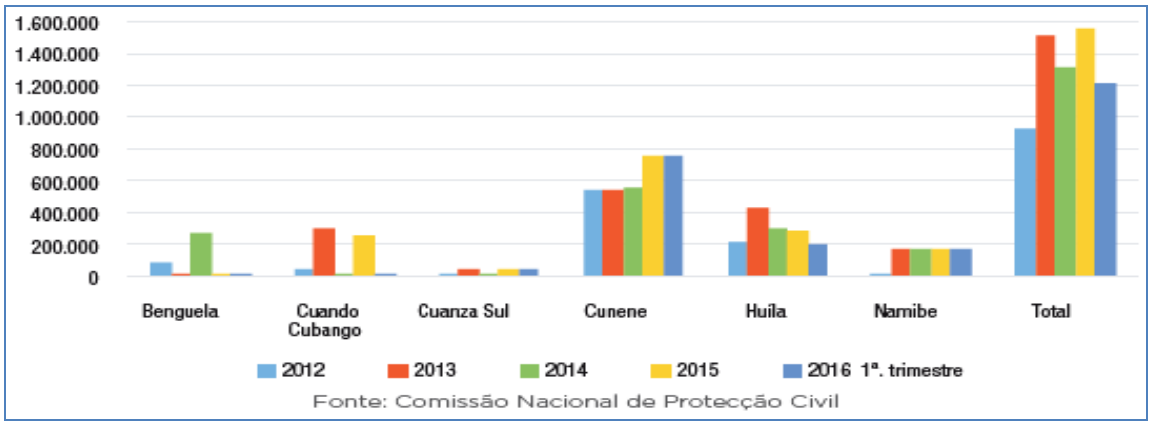


Figure 16: population affected by draught between 2012-2016

12. During the first 3 months of 2016, 1,2 million people were affected by drought, in particular in three provinces: 1755,930 in Cunene, 205,507 in Huila and 177,627 in Namibe. Total damages for all sectors accounted for 297,2 million USD with 452,4 million USD in losses. Agriculture, livestock and Fisheries were the most affected sectors accounting 244,7 million USD (82% of all damage).

13. The contingency planning (preparedness and response) led by the inter-sectorial National Civil Protection Commission with technical support from the UN have identified the key drivers of vulnerability that include inequality, poor nutrition diversification, high illiteracy rates in rural areas, poor quality of basic services, salinization of ground water and limited fresh water resources, desertification and deforestation, monoculture, agro-pastoralist production systems with heavy environmental effects on the natural resources, low purchasing power, illegal occupation of land in the risk zones, weak implementation of land occupation policies, weak implementation of disaster prevention, contingency and preparedness policies/directives, weak research, data collection and analysis and predictions of disasters and risks and lack of environmental management culture and capacity within the agriculture sector.

14. The current La Niña event is compounding the adverse impacts of the El Niño; areas most effected by rainfall deficits during the El Niño are faced with a large surplus in La Niña years. Average rainfall enhancement from February to April representing the peak deviation from the neutral average, highlight that the south of Angola is at greatest risk from La Niña related climate shock (see Figure 15). As with the drought, Cunene, is the most affected province with flooding along the riverine areas. This coincides with crops coming towards the main harvest period, grain development enhances the risk of lodging (crops falling over). Soil saturation and flooding can induce this affect and increase toxicity, resulting in the loss of crops. Additionally, heavy rain washes away feeder roads interrupts market access and reduces dispersal; results in reduced profitability and food security (Angola, ENSO Profile, IFAD/WFP, 2016).

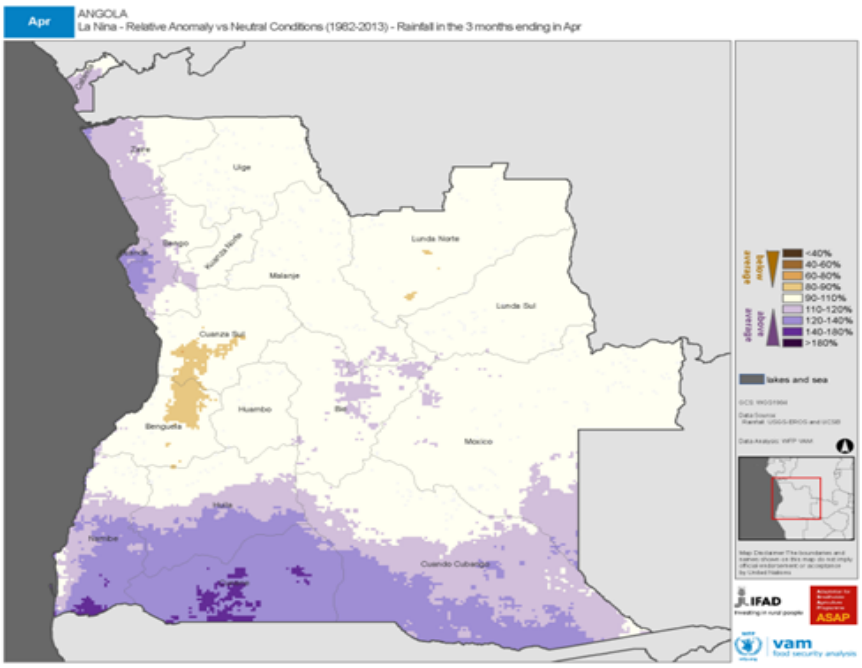


Figure 17 Average rainfall enhancement from February to April

Potential project's social, environmental and climate change impacts and risks

15. The SREP is primarily focused on increasing/ed resilience as well as production and food insecurity risk management capacity reducing community vulnerability and creating market opportunities. The activities promoted by the project are likely to have environmental and social impacts that can be addressed through the implementation of best practices and local-based environmental and social management plans. The potential positive impacts of the SREP include improved livelihoods through improved productivity and resource use efficiency leading to increased resilience to climate change effects and, in particular, extreme events. Potential expected negative impacts are water and soil contamination, deforestation and land degradation due to increase use of inputs and lack of land and water management capacity. Land tenure conflicts and lack of technical capacity on mechanized production, irrigation infrastructures management and marketing services may also potentiate negative impacts. Lack of capacity in integrating environmental and climate change concerns and routine management practices reduces the environmental profile of the interventions. Environmental quality monitoring is still far from being a regular practice and lack of base line information related with water and soil quality limits the potential of monitoring. Environmental awareness and technical capacity in the agriculture sector is weak. Some climate change risks and potential impacts on the livelihoods sources in the targeted provinces are summarised below. SREP will aim to build the resilience to these stresses.

Livelihood system	Climate variable	Potential impacts
Crop production	Rising temperatures Increased rainfall variability Increased rainfall intensity	Increased incidence of pests and diseases, low crop yield; changing cropping calendar/dates, late harvest, crop failure, gully & sheet erosion, loss of farmland and soil fertility, water logging leading to the loss of deep rooted crops; increased sedimentation; siltation of water bodies
Livestock production	Increased variability in rainfall patterns: Rising temperature Increased	Lack of water availability for livestock; reduced forage availability; poor livestock health linked with heat stress which reduces the market value of affected livestock, reduction in livestock productivity; loss of livestock; loss of pasture land and; increased incidence of diseases; damage and/or loss on infrastructures

	intensity of rainfall	
Fisheries and Aquaculture	Temperature increase Increased rainfall variability	Drying up of waterways, drawing down of water levels in reservoirs, wetlands and ground water; loss of biological diversity of fisheries resources due to habitat degradation; increase in aquatic vegetation; along the edge of waterways; pollution/eutrophication of fresh water through the decay of aquatic vegetation

16. Criteria for guiding selection of beneficiaries in the northern area includes: (a) a high incidence of food insecurity and vulnerability, b) a potential for agricultural development; (c) a high population density; and d) geographical contiguity to maximise efficiency of project operations. For the south, SREP will target the municipalities that are included in ARP which were selected as the most critically affected by drought (8 municipalities) as well 5 municipalities in Namibe. Within the municipalities communes will be targeted that are vulnerable to food insecurity and have potential for development. The target beneficiaries are smallholder farmers, with a special focus on women, youth and rural vulnerable groups. Special attention will also be given to the needs and priorities of handicapped persons and the reintegration of ex-combatants. The selection will be informed by more detailed assessment of needs within target communities.

17. Environmental and social category – The environmental and social category assigned to SREP is B. It will support activities, including: agriculture intensification in non-sensitive areas[74]; integrated pest management and credit for pesticides/other agrochemicals purchase and training in their safe use and SLM practices. The agricultural production activities and construction of livelihood supporting infrastructure may result in localised environmental impacts which can be managed and minimised through the implementation of best practices and ESMP if required. Feeder road rehabilitation and market infrastructure investments will be designed, constructed and operating under adequate environmental and social standards. Environmental management, monitoring and mitigation capacities will be developed through awareness and training on best practices and preparing site management plans. Contents on the awareness and training will cover waste management practices, safe handling of agro-chemicals, improved pest management, improved storage and improved soil and water conservation measures and natural resources management. Potential conflicts with wildlife fauna may occur at particular sites. These impacts will, moreover, be mitigated by providing training on good-use practices and preparing site management plans. If required, the site specific Environment and Social Management Plan will be developed for the project during design. The awareness and capacity building activities for farmers will be delivered through Farmer Field Schools while more technical training will be provided for IDA/EDA and Environment Ministry Departments at provincial and municipal level.

18. Climate risk category – The climate risk classification for the SREP is high. The northern provinces correspond to rain-fed crop regions, which are subject to significant annual variations in rainfall, and therefore productivity fluctuations. The southern provinces have been severely affected by droughts and floods (e.g. La Niña event in 2016/2017 resulted in floods in some parts of the region). In both areas farmers use traditional cropping methods, with limited awareness of soil or water conservation, replacement of soil nutrients, choice of plant varieties, irrigation, or other climate adaptive technologies. A detailed climate vulnerability analysis will be conducted to further inform the adaptation measures that SREP is expected to bring including improvements in cropping technology, which will increase farmer's resilience to climate variability and climate change.

19. Recommended features of project design and implementation – As a project aiming to promote resilience SREP should promote improved community livelihoods and encourage the sustainable use and management of ecosystems and natural resources in general. Awareness and capacity building on environmental management will be provided to extension officers as well as to farmers (through Farmer Field Schools) enabling them to carry out the assessment of environmental and climate change related risks and the development of local based landscape, water and natural resources management plans. Better land and water-use planning as part of integrated environmental management will contribute to increase resilience. These local based management plans will include

[74]Although for some areas potential conflict swith wildlife is expected

disaster risk reduction (drought and floods), appropriate management of inputs, soil conservation, management of fragile ecosystems and biodiversity species relevant for conservation.

20. Climate sensitive technologies such as drought tolerant varieties, water harvesting and diversified livelihoods will contribute to building the resilience of communities. The SREP can ensure that good quality drought tolerant varieties are included in the packages to be provided to the smallholders especially in the southern areas. In addition, purchase of well-labelled seed of known varieties of reliable origin should be encouraged. The input supply systems will need to be developed and can be incorporated in the seed production activities to promote community multiplication areas of selected varieties or commercial multiplication.

21. SREP can also contribute to the improved use of climate information services both by the extension services, who advise farmers and also by the smallholders themselves. The starting point will be improved climate data collection that will entail a strengthening of the agro-meteorology network in collaboration with INAMET. Data analytical capacity will also need to be enhanced both in INAMET and MINAGRIF. Participatory approaches for climate information services will promote the use of climate information at the farm level. The climate information will include both the future projections and historic trends analysis.

22. Poultry rearing, aquaculture, horticulture and apiculture activities are part of the livelihoods diversification and will require capacity building activities to enable the target communities attain the benefits of the technologies that will be promoted. The Farmer Field Schools will include application of fertiliser to early-planted and well-weeded crops as well as climate change adaptation measures including water and soil management and maintenance of production support infrastructures. The capacity building should be extended to cover waste management and also explore the possibility of using some of the organic waste for manure and promoting integrated crops and livestock systems. Technical services and staff at local (municipal and provincial level) should also receive training on environmental management, monitoring and impact assessment.

23. Consideration should be given to appropriate livestock breeds that are tolerant to heat and water stress conditions. In addition, efforts to promote improved husbandry should include reliable water and feed resources and limit reliance on exotic breeds. Particularly in the southern areas, the cultural context is also important to consider as the agro-pastoral groups tend to value livestock as household wealth and therefore numbers matter more than the health status of the livestock.

24. Mainstreaming environmental and climate risk management in the agriculture sector is a decisive element for ensuring adaptation and increase resilience of communities and activities. Awareness and technical training in environmental management and climate change adaptation options should be provided for the smallholders and technicians applying the concept of building resilience of the local communities under a more long-term perspective. EIA screening and assessment as well as environmental management training for technicians (MINAGRI and MINAMB) at provincial level should be provided in order to promote adequate environmental performance to the project and transfer knowledge to farmers on natural resources management.

25. Analysis of alternatives – The alternatives considered in the design were in the approach to rebuild and/or improve livelihoods and the related activities to be included that initially had a stronger focus on resilience building. The prioritisation of the activities proposed was based on the livelihoods assessment, with a decision to streamline the intervention with a focus on improvement, build on existing interventions and not to introduce completely new crops or livelihood options in the target areas. Effective capacitation and implementation immediate production activities, job diversification and best practices on environmental and natural resources management were given priority in relation to other potential interventions requiring longer duration.

26. **Institutional analysis** –The Civil Protection Agency led the Development of Pilot Provincial Strategies for Building Resilience of vulnerable communities and local institutions in the most drought affected provinces. These provincial government owned pilot strategies (2015-2017) aim to support inter-sectorial coordination mechanisms for planning, implementation, monitoring and evaluation as well as joint mapping of vulnerable groups, and analysis of risks (hazards, vulnerabilities, and capacities); improving the capacities of provincial government staff to guide the planning and implementation of integrated resilience building activities at municipal and community levels and; support enhanced information management. Various on-going initiatives providing support for income generation, sustainable land management, disaster risk management, animal health services and

building climate resilience among vulnerable communities have also been mapped to indicate areas of reach and available resources.

27. Following emergency interventions from the Ministry for Social Assistance and Reintegration that included distribution of food packages to vulnerable groups, particularly the aged, SREP will contribute to increase resilience and adaptive capacity at community level through capacitation that will complement investments in small infrastructures, equipment and inputs. Capacitation of MINAGRI and MINAMB technical staff at provincial level will support the assistance to the establishment and development of farmers organizations (associations and cooperatives) and to the use of improved agriculture techniques and integrated management of land, water and natural resources. After the drought event in 2015/16 associated to El Niño, that followed four consecutive dry years (2012-2015), The Government of Angola (GoA) requested technical assistance to the United Nations (May 2016), for developing a Post- Disaster Assessment Needs (PDAN) in the provinces of Cunene, Huíla e Namibe and, subsequently to develop a Resilience Building Framework. Following this assessment, the GoA requested technical support to implement the measures porposed in the PDAN. This included a consultation process with meetings and workshops with representatives of several ministries who decided on the actions and budget for the implementation of the Resilience Building Framework.

28. Regarding the disaster risk management, a National Disaster Loss Database, 'DesInventar', was launched by the CNPC in Angola in April 2016 to facilitate evidence-based policy decisions and reporting internationally against the targets set in the Sendai Framework on DRR 2015-2030 and the SDGs. The database was established with technical support of UNISDR facilitated by UNDP. DesInventer was installed in the UNISDR server in Geneva, facilitating data entry in a single server with maps, hazard list and indicators configured.

29. MINAGRI through IDA extension services at provincial and municipal level provides capacitation and technical support to farmers' activities but logistic and technical limitations are evident. Environmental capacity is far from being mainstreamed within the agriculture sector and extensionists lack sufficient knowledge to promote and enhance environmental management and integrated natural resources management. Capacity building and training will be essential on the screening process for project activities and sites in order to identify potential impacts of the project and determine appropriate environmental and social category of the project leading to identification of impacts. However, logistic, technical and human resources of MINAMB at provincial and municipal level and weak cooperation with other governmental departments limits environmental screening, assessment and monitoring. INAMET stations network is still far from being able to generate accurate meteorological information at local level including early warning.

30. Monitoring and Evaluation – The implementation period for the project is six years with an assessment envisaged after year 3. Priority should be given to monitoring the implementation of capacity building and awareness on environmental management and climate change adaptation techniques and strategies as a central element of building resilience and adaptive capacity and how farmers understand and implement adequate best practices and environmental management measures. The number of extension officers trained and able to train farmers on best practices and natural resources management as well as the number of local based natural resources management plans developed and implemented and area covered by these plans should also be measured. Other primary impacts should be also monitored, like number of farmers using improved seeds, whether the seed was planted, how much additional land was planted and how much produce was harvested.and the number of households with improved access to water resources for farming and domestic use. Levels of income generated at household level can be monitored and use of the packages received for this purpose. Diversification of jobs, the creation and number of operative associations and cooperatives should also be included in monitoring and evaluation. Project planning and tracking can benefit from the creation of a calendar of activities, which will need to be linked, ultimately, back to the farming calendar. Further specific environmental and social related issues will be monitored within the ESMP implementation.

31.**Further information required to complete screening, if any** – No further information is required for screening However as the climate risk classification is high, an in-depth climate risk analysis will be undertaken before the Project implementation starts. An ESMP will also be developed based on the B categorisation.

32.**Budgetary resources and schedule** – Resources for an in-depth climate risk will be allocated separately. The ESMP resources have been included as part of the design. However, where further site specific ESMPs are required for the infrastructure developed, these will be incorporated in the Project costs.

33.**Record of consultations with beneficiaries, civil society, general public etc.** – Consultations were undertaken during all stages of the preparation and design of the project (including missions in April and July 2018 with field visits to the Provinces of Zaire, Kwanza Norte, Bengo and Uíge) involving potential beneficiaries, government agencies at national provincial and municipality levels, development agencies and NGOs. More in-depth consultations were also held with potential beneficiaries in the form of a needs assessment for profiling the households as part of the targeting approach and data collection. A stakeholder workshop will be organized during the second design mission promoting discussion and obtaining feedback. Specific consultations will also be made in the field during the development of the ESMP.

Mitigation and monitoring plan

34. The Table 1 below, identifies a set of mitigation and monitoring measures addressing the expected negative impacts that will be part of the overall ESMP and that will be fine-tuned in the final ESMP as well as according with the experience and results of monitoring their implementation. Most of the expected negative environmental and social impacts may be effectively mitigated through measures that should be established for the different sequencing and components of the project. The mitigation measures will ensure compliance with the national and international environmental and social guidelines and procedures. The preliminary ESMP presents a generic set of mitigation measures that should be included and complemented in the Environmental and Social Management Plans for each subproject. Each ESMP will be budgeted in the technical specifications of each subproject. Responsibilities, indicators and monitoring conditions are also suggested for implementation during the different stages of the project.

Table 1 - Resume of the Environmental and social mitigation measures, monitoring and indicators.

Environmental/ Social Impacts	Recommended Mitigation	Responsible Institution (Design Stage)	Responsible Institution (Implementation Stage)	Means of Verification/Indicators	Frequency of verification
Loss of vegetation	Selective clearing of project sites, reforestation, preservation of protected plant species, use of alternative sources of energy, use of environmental friendly technologies, awareness campaigns.	Contractors, Project staff, Province/Municipal District Agric. Officers	Contractors Project Coordination	Increase in area of land cultivated and deforested	Monthly
Loss of Soil	Stabilization of loose soil, controlled excavation, preservation of vegetation cover, controlled transportation of raw materials, appropriate landscaping.	Contractors, Project staff, Province/Municipal Officers, Forestry Department	Contractors Project Coordination	Area and size of gullies formed Amount of silt deposited in watercourses	Monthly
Loss of fragile ecosystems and relevant biodiversity species	Conduct feasibility studies before construction, use expert knowledge of ecologists, introduction of ecosystem conservation projects, fencing	Project Coordination, Province/Municipal, Environment and Forestry Departments	Contractors Project Coordination	Size of area and species affected	Monthly
Soil and water pollution resulting from the accumulation of solid and liquid waste Soil and water pollution from chemicals & fertilizers	Controlled disposal of waste and effluent by use of appropriate disposal facilities, use of appropriate drainage structures, use of cleaner technologies, proper storage of materials, awareness campaigns	Project Coordination, Province/Municipal, Environment Departments	Contractors Project Coordination	Change in chemical and biological water quality Number of reported pollution events	Bi-annually Annually
Loss of natural and cultural heritage.	Conduct feasibility studies, fencing, introduce proper antiquity education programmes	Project Coordination, District Agric. Env and Cultural Officers, NGOs	Contractors Project Coordination	Number or size of property lost	Before project implementation During project implementation
Dust, Emissions, Strong Light, Noise and Vibration	Controlled operation times, use of appropriate equipment, proper orientation of lights, use of alternative materials, use water sprinklers to control dust, use of scrubbers	Contractors Project staff	Contractors Project Coordination	Number of complaints Extent of property and vegetation soiling	Monthly
Disturbance of	Avoid extraction of raw materials	Project Coordination,	Project Coordination,	Size of area affected	Bi-annually

Environmental/ Social Impacts	Recommended Mitigation	Responsible Institution (Design Stage)	Responsible Institution (Implementation Stage)	Means of Verification/Indicators	Frequency of verification
marginal areas	from marginal areas, no construction of structures in marginal areas.	Province/Municipal, Environment Departments	Province/Municipal Authorities and NGOs		
Water logging	Provide water management training to farmers	Project Coordination	Project Coordination	Prolonged presence of water Poor growth of crops Presence of salts on the soil	Annually
Incidence of Flooding	Forestation of the catchment areas of the irrigation schemes	Project Coordination, Province/Municipal, Environment Departments	Forestry Department Project Coordination, NGO's, Province/Municipal Authorities	Number of trees planted Area planted with trees Number of people or properties affected by floods	Annually
Disruption of footpaths	Good irrigation scheme designs Relocation of the footpaths	Project Coordination Scheme Management	Project Coordination Scheme Management	Number of footpaths in use Problems of accessibility	During design During construction
Waste generation	Awareness Campaigns, assignment of adequate sites and equipment for waste collection and temporary storage	Project Coordination, Province/Municipal, Environment and Education Departments/Schools	Project Coordination Province/Municipal, Environment	Number of campaigns % of good use of waste collection equipment	Monthly
Spread of HIV/AIDS	Strengthen HIV/AIDS Awareness Campaigns in Schools, Training of school administrators and staff in HIV/AIDS issues, encouraging participation of the private and public sectors in HIV/AIDS issues and reinforcement of school curriculum with HIV/AIDS issues.	Ministries Project Coordination, NGOs, Gender and Community Services, Local institutions and committees, Community, Municipal and Provincial authorities	Project Coordination Ministries (Health and Education) Local institutions and committees	Number of campaigns % increase in those affected.	Annually Monthly (Monthly statistics from hospital and clinics)
Water-borne and / or water related diseases	Provision of potable water supplies and sanitation facilities, capacity building in sanitation and health issues, awareness campaigns	Project Coordination, Province/Municipal, Environment and Health Departments	Contractors, Project Coordination, Provincial/Municipal Authorities, NGOs	Increase in water related ailments	Bi-annually
Exposure to Agro-chemicals	Encourage organic farming, and limit the use of Agro-chemicals. Conduct awareness training & workshops	Project Coordination Ministry of Agriculture Scheme Management	Project Coordination Ministry of Agriculture Scheme Management	Number of people affected by agro-chemicals	Annually
Work related accidents		Project Coordination, Province/Municipal, Authorities	Project Coordination	Number of reported accidents	Annually
Salinization	Encourage organic farming, limit	Project Coordination,	Project Coordination	Farm productivity (per	Annually

Environmental/ Social Impacts	Recommended Mitigation	Responsible Institution (Design Stage)	Responsible Institution (Implementation Stage)	Means of Verification/Indicators	Frequency of verification
	the use of agro-chemicals and provide water management training to farmers	Province/Municipal, Authorities		hectare)	
Disputes over water resources	Provide water management training to farmers and introduce alternative sources of water such as boreholes.	Project Coordination Project Coordination, Province/Municipal, Authorities	Project Coordination	Water availability Crop productivity Number of complaints	Annually

A complete Environmental and Social Management Plan that incorporates the above listed mitigation measures has been prepared and is included in the Project Life Files.

Appendix 13: Farming Systems in the Northern Provinces

1. A comprehensive description of the farming systems of the drought affected areas in the south of Angola was given in Appendix 13 of the Angola Recovery Project (ARP). This appendix will consequently focus on the northern provinces of Angola.

Agro-ecological situation

2. ***Topography, vegetation and soils:*** Large parts of SREP are located on the high altitude plateau, along the northern border of Angola with the Democratic Republic of Congo (DRC). In the northern sub-zone, topography ranges from undulating to steep hills. Altitudes range from 1300 to 1500 masl. As altitude and rainfall vary throughout the region, vegetation shifts from rain forest in the higher northern zones to savannah grasslands at the lower altitude and rainfall zones. The soils are diverse ranging from a mixture of sandy and clay. The majority of the soils are ferralitic of naturally low and moderate fertility. In the southern areas altitudes are lower ranging from 1000 to 1200 masl, and the topography is undulating and steep in places. The soils are similar to those found further north. Vegetation is broad leaf and hard wood forest.

3. ***Climate:*** The climate of the northern highland region is classified as sub-humid. Annual rainfall varies from 1,000 mm in the southern part of the project area up to 1500 mm in the highest hills of Uige. Rains normally commence in October and last until April with a dry season extending from May/ June to August. The rains are interrupted by a short dry season of normally 3 weeks in December to January. Mean temperatures range from a minimum of 20° to a maximum of 32° Celsius. Minimum temperatures average 20 to 22^0C during the dry season. Low temperatures in the higher altitudes restrict plant growth. Relative humidity during the rainy season can reach 85-90%.

4. ***Land and water resources****:* There is an abundance of cultivable land in the project area but available land can be scarce close to the provincial capitals and in peri-urban areas. In some of the isolated steep locations close to villages, areas of soil erosion can be found. Most soils are of relatively low fertility and as crop production per unit of land improves, problems of soil fertility will assume greater importance. As the traditional farming system is based on rain fed crops, and some water stress occurs in the dry season, water availability is not a major constraint. Supplementary irrigation, over the dry period has considerable potential.

5. ***Agro-ecological areas***: The four provinces of the north cover three main agro-ecological areas. a) The coastal area of Bengo which comprises an almost continuous platform along the coast at an altitude of 150 to 250 masl. b) A subplateau strip, an intermediate surface transitioning to the interior of the plateau, at an altitude of around 400-600 m and island hills and mountain ranges that can reach up to 1,000 masl.; and c) Peneplain Zaire, that consist of are sandy slopes that fall steeply from an altitude of 1,200 masl along its border, up to 500 masl, inland.

The Farming System

6. ***Overview:*** The population density of the northern provinces is approximately 10-20 people per square kilometer (National Population Census-2000). The farming system is a cassava based mixed food cropping system which is typically practiced by all smallholder farmers in the provinces. Rainfed agriculture is carried out with unique intercropping practices for cassava, banana and coffee cultivation, which increase the banana and coffee yields. Coffee production has been re-introduced over the last decade with GoA providing financial incentives. Other crops include maize, beans and vegetables. Livestock holdings include cattle, goats and poultry which are kept for consumption.

7. Shifting cultivation is practiced with plots normally cropped for 2 to 3 seasons. In areas where there is higher than normal population pressure, fallow periods have been shortening with a subsequent decline in soil fertility. Since land is available, fallow periods of 8 to 10 years were commonly found in the past. This rotation has been changing quite markedly over the years and shorter fallow periods can be found close to villages and urban centers. Land clearing starts in the dry season (August to September) when vegetation is cut and burnt. Land preparation begins before the rains start and ridges are formed. With the onset of the rains start cassava, sweet potatoes, maize,

groundnuts and beans are planted. In the second rainy season a second crop of cassava and beans is planted.

8. The farm household's primary objective is food security as reflected by the cropping pattern and diversity of crops grown. The most important factor determining the area of land cultivated by a family is its size and the availability of family labour to work the farm plots. Families average 5 to 6 members with 2 to 2.5 adult labour units per family. The area cultivated by an average sized family varies between 1.5 hectares closer to the sea and 2.7 hectares in the mainland. Typically crops are planted in two seasons following rains, usually in different locations. Each adult family member has his or her own plot and is normally helped by other family members when labour intensive operations are needed.

9. The project area contributes to more than 60% of the national production of roots and tubers with cassava the main food crop. In addition to cassava production, the region also produces peanuts, beans, bananas, maize and sweet potatoes, all of which are part of the local food diet. Surplus production of food crops above household needs are sold locally. Other crops include potatoes, coffee, bananas, palm oil, yams, fruits and vegetables, which are commercially sold. The productive potential of the region is significant, if one takes advantage not only of the soil-climatic characteristics but also of the knowledge and experience of the local rural population. Smallholder farmers had experience, during the colonial period, in mechanical traction with produce marketed in local towns as well further afield in Luanda.

10. Despite this potential, there are some constraints to agricultural development. Challenges of access to water, energy, markets (transport and roads) and finance prevail in the rural areas. These limitations result in variable levels of productivity and low income. These challenges are compounded by limited access to drinking water and agricultural services (mechanization, extension, input availability) that respectively impact on health and agricultural productivity. There are also low levels of literacy amongst the rural population that restrict their access to new technologies and the adoption of more profitable activities. These restrictions also have a stronger impact on women, who are the majority of the effective workforce in the rural areas.

11. ***Seasonal calendar:*** As mentioned before, the rainy season lasts from October until the end of April/May followed by the dry season, from May to September. The lean period is from January to February. Land preparation takes place from June to September, followed by planting and sowing in October and November and weeding from December to January. Planting and weeding operations provide employment opportunities for the poor. The main cereal harvest takes place in June. Activities related to cassava production take place throughout the year. Other important seasonal activities include lambing, kidding, calving and milking from October until April the following year.

12. ***Crop cultivation techniques:*** Most cultivation is conducted by hand, limiting the areas under cultivation. On average between 0.8 to 1.2 hectares are cultivated in some areas. Increasingly the 'better off' smallholder farmers employ labour and hire tractors and can cultivate larger areas.

13. Cassava: Cassava is by far the most important crop grown in the project area in terms of area sown and production. The crop is responsible for about 65% of all national production in the family farm sub-sector (2012/13). The provinces of Uíge and Cuanza Norte, represent35% and 12%, respectively of the region's production. The highest levels of productivity are reached in Zaire, Uíge, and Cuanza Norte. Cassava is grown for food and as a cash crop with sales of fresh roots and/ or processed products (dried cassava chips or flour). There is a diverse mix of varieties in the project area with 70% bitter and 30% sweet. Local varieties take 15 to 18 months to mature, but harvests are sometimes delayed for as long as 24 months. Field visits revealed healthy stands, although mosaic virus and mealybug infestation is reported to occur in the area. Cassava yields are moderate with the majority of cassava plots producing less than 8 tons per hectare. In some cases with improved, short duration, varieties yields can reach 12 tons.[75] The main factor affecting low productivity is poor planting material, although cultural practices and low soil fertility also contribute. Appropriate planting

[75]Short duration varieties are being supplied by IITA and come over the border from DRC. The names of these varieties are Keet, Voisi, Tiam, Zezela.

materials are particularly in short supply. Low planting densities and inadequate weeding are among the factors that could be improved by on-farm trials and extension support. Acidity problems are generally found in most locations. Although cassava can be planted throughout the year, farmers prefer to plant cassava in the second season since less weeding is required. Roots are harvested throughout the year but mostly in the dry season since drying of the crop is easier at that time. Farmers report that cassava flour quality deteriorates if the drying operation is prolonged because of rains.

14. Maize: Maize is normally planted during the first season, after mid-October and is intercropped with cassava, beans and groundnuts. Local varieties are of the 120 days duration. At present only local varieties are mainly grown, although some improved varieties have been imported from Zambia. Local varieties are generally drought resistant and low yielding. Yields average around 1.2 tons/ha. Poor planting material, low soil fertility, sowing times and inadequate cultural practices are the main factors constraining maize productivity. Poor harvest losses of maize are commonly high since harvesting normally coincides with the first rains resulting in high grain moisture content. Although simple storage facilities exist in the project area, there is a clear need to improve maize grain storage. Most maize is commercialized as grain.

15. Sweet potatoes. Sweet potatoes are grown as both a food crop and cash crop. Normally about 50% of the crop is utilized for family consumption and the remainder traded for cash or for basic consumer goods. Although cassava is the preferred root crop, sweet potatoes have been a part of the food crop farming system for some time. With the disruption created by the war, a scarcity of cassava planting material stimulated an expansion of sweet potato in the project area. Sweet potato production represents an important part of the national production of the crop (Season 2012/13: 56%).Approximately 66% of the total production is produced on family farms. Low yielding varieties are normally grown although a number of new improved varieties have been recently introduced. Production ranges from 4-5 t/ha. The local varieties are of 70 to 90 days duration and the higher yielding varieties are of shorter duration. It is reported that the improved varieties have been well accepted by farmers. The area planted with sweet potatoes is generally small, 0.25-0.30 hectares split between the first and second seasons for food security reasons. Sweet potatoes are intercropped with cassava and beans. Although sweet potato is a simple crop, not very demanding in terms of resources, and adaptable to varied agricultural conditions (especially to drought and poor soils) and has a short cycle, it suffers from several challenges: (i) lack of seed availability at the beginning of the rainy season; (ii) lack of adapted varieties; and (iii) rudimentary production, storage and storage techniques and, consequently, high losses after harvesting. The crop does have considerable potential particularly for its commercialization. The production of flour is already common practice, but other transformations and uses could be developed, for example the production of cooked pieces or tubers as an ingredient in the manufacture of cakes, breads and beverages.

16. Pulses – beans and cowpea. Beans are of special importance to household food security and is an important protein supplement to the diet of the local population. In addition, the crop contributes to the improvement of soil fertility and can be intercropped with various crops including maize. Most of the beans are produced in Uige province. Beans isa basic ingredient of the diet of the rural population and its consumption is also high in urban areas. There are three main species of beans: lablab, butter bean and macunde. Lablab is largely found in the low coastal zone and butter beans in the sub-plateau and plateau zones of the region. Lablab is grown mainly in the coastal strip in the provinces of Zaire and Bengo. These crops offer good potential for immediate growth, having a central role in food security in the region and high potential to contribute to agricultural development. Yields are moderate averaging between 4-500 kg/ha. The crop can be grown over the two seasons. Cowpea has become popular in some zones of the project area, reportedly because of its higher potential yield reaching up to 700 kg/ha. Cowpea is also widely found given its high yielding potential, resistance to disease and high protein content.

17. Groundnuts. The northern provinces produce over 50% of national production[76]. Groundnuts are a major source of cooking oil and are grown as a source of food and as a cash crop. The crop adapts well to the tropical/ subtropical climate of the area and has limited water requirements.

[76] Of which Uíge province has 24% of the production in the region, Bengo, 18% and Lunda Norte, 15%.

However, given the water storage capacity of the soils, satisfactory yields are usually reached when rainfall levels exceed 600 mm, and are well distributed. The growing season, is, consequently, the rainy season from January to May when temperatures are high (around 28^{o} C) which favoursa high oil content. Up to 60-70 % of the crop is commonly sold in markets. Local varieties are generally planted, although some new planting material has been reportedly introduced from India. Groundnuts are mostly planted in the first season together with cassava and over a growing period of 90 to 120 days. Yields of 600 kg/ ha have been commonly found.

18. Vegetables. Cauliflower, tomato, and onions are grown in some locations during the dry season as a source of food or for cash. However, irrigation is essential. Vegetable gardens are cultivated along rivers streams or in proximity to springs. Commonly simple gravity irrigation systems are used. Very few local varieties are available and vegetable production is constrained by a shortage of seeds.

19. Banana. Banana is an important crop in all of the northern provinces.However, it does not have the same importance in terms of volume of production as in the Central Provinces of Angola - which account for three quarters of the national production. Banana, amongst family farms, is mainly grown in Uíge (32%); Bengo (23%) and Zaire (21%). The optimal temperature for banana oscillate between 25^{o}C and 30^{o}C, at an altitude of less than 500-600 masl. The crop is very demanding in water, requiring an average rainfall of between 1,500 mm to 2,000 mm, well distributed throughout the year. The ideal soils are the alluviums of the lowlands or hillside slopes, usually enriched by appreciable content in mineral reserves. Banana trees are widespread around the homestead of the smallholders but also in communal plots. In parts of Bengo along the coastal and sub-coastal strip, bananas need to be irrigated. In the sub-plateau interior area, bananas are grown under rain fed conditions.

20. Coffee. In the past, coffee provided the main source of farm income in Uige and Cuanza Norte. Extensive plantations of Robusta coffee can be found over the hills of Uige under shade from large native trees creating a favourable micro climate. The crop is rapidly becoming the main source of agricultural income.

21. ***Livestock:*** Livestock in the past constituted an important part of the farming system in the northern provinces. Most cattle, however, have disappeared as a result of the war, although in Uige many livestock do remain as the fighting there was less severe. Small stock in particular poultry and small ruminants are still widely found and pig production is expanding gradually.

22. Cattle breeding; Cattle breeding can be divided between family farms and commercial farms. Cattle breeding on family farms can have large importance both economically and socially, in some areas although cattle numbers are low. According to data provided by MINAGRI, the project provinces account for only 1% of the country's bovine population, albeit contributing to around 11% of meat production in the country (includes Malanje province). The most common breeds are native imported from Brazil and Namibia and crossed locally.

23. Goats: Goats play an important role in the family economy, and in are commonly looked after by women. Goats are kept as a wealth reserve and are sold when households incur cash demands. The number of goats in the north represent around 17% of the national population and accounting for 14% of the country's goat meat. They are traded and transported live to other provinces, either for breeding or for slaughter. In the smallholder sector, the species can be found in the provinces of Bengo, Cuanza Norte, Uíge, and Zaire.[77]

24. Sheep: Some 22 percent of the sheep population of Angola can be found in the northern region, with the majority in Cuanza Norte and Uíge. The sheep belong to the West African dwarf sheep group, trypanotolerant and have been adapted to the region.

25. Pig: The northern provinces have less than 10% of Angola's pig herd (2011 data), with Uíge the province with the largest number of pigs, followed by Zaire and Cuanza Norte. Some 12 percent of the national pork production emanates from the seven northern provinces. One of the major constraints to

[77]The exploited breeds are those native to the West African dwarf goat group, trypanotolerant and adapted to the conditions of the regions

the development of pig farming is the recurrent occurrence of African Swine Fever. Pig farms in Bengo, Cuanza Norte, Uíge, and Zaire provinces. The pigs belong to a group of native pigs adapted to the region. With improved animal health there is considerable potential for pig farming to expand rapidly.

26. Poultry: Birds are native to the area and have a social and economic function. The most commonly found poultry are chicken, duck and guinea fowl. In 2012, the poultry stock of the 7 northern provinces represented some 10% of the total poultry stock for the country (MINAGRI), but accounting for approximately 25% of meat production at national level. Commercial poultry is expanding rapidly and is having a significant importance as an income generating efarm enterprise for family farms.

27. ***Labour availability and use:*** As demonstrated above, agriculture is the main economic activity in the project area and the majority of the population are engaged in food production to meet their food requirements with surpluses sold to satisfy their other food and basic living needs, Both men and women are employed in food production but women make up the majority of the labour force. Only close family labour is used in the production of food, even though extended family members often help each other during peak labour demand periods i.e. land preparation and harvesting. Women are generally assisted by men in land clearing and in the heavy work of preparing ridges before planting. Besides food production, caring for their children and preparing food, women also collect water, firewood and spend considerable time processing cassava and maize. All operations are performed manually. Labour saving technologies are not widely used on any significant scale notwithstanding the limited labour availability (particularly female labour availability) to develop the food supply.

Main income sources and markets

28. The primary determinants of wealth are size of land cultivated and the types of crops grown. Other factors include access to productive assets and to paid employment. Cash income among the poorest households is largely derived from the sale of cassava, natural products (charcoal and firewood), labor, hand crafts and fish. Other sources of income include employment in the timber industry and agricultural labour.

29. Amongst the better off households income is generated from both sales of food crops (largely cassava) and higher value crops such as banana and coffee. The better-off group also relies on sales of fish, timber and skilled labour in the commercial timber industry. The main markets are Malanje, Ndalatando, Uige and Cabinda. Marketing of local products, including labor mainly takes place within the region but trade with Luanda, the coastal markets of Catumbo, Barra-do- Dande, Cacuaco and Cabinda, as well as with the Democratic Republic of Congo, has risen markedly. The main constraint to market access is seasonal flooding.

Food storage and processing

30. Some traditional food storage techniques can be found in the project area at household level, the majority of food production is not stored under suitable conditions and this has resulted in substantial post-harvest food storage losses. Post-harvest losses due to widespread insect and rodent damage in the poor storage systems used currently were found during the field visits. Crops are dried on roads and on the open ground where considerable crop losses occur.

31. Cassava processing represents one of the most time consuming activities for women. Since cassava is the main crop grown, large quantities could be processed by smallholder families. The expanded production of cassava over the years has led to processing bottlenecks amongst smallholders.

Land tenure and ownership

32. In Angola all land belongs to the State that determines its final use and destination. In order to preserve the rights of the rural communities, the 2004 Land Law takes into account the customary land use system that prevail in the different provinces and cultures of the country. This was expected to provide security of tenure also in the case of permanent investments in the land, e.g. small-scale

irrigation, used by community-based groups and associations. The law foresees that land for private agricultural investment would be regulated through perpetual land use rights transfers of ownership, sold by auction from the State to private actors. At the same time, the Land Law subjected those with informal rights to eviction if they fail to apply for a concession in a timely fashion. In most of the project area, however,there is no straightforward competition for scarce land, due to the still very low population density. However, in areas close to forest land, some competition is being realized.

33. **Farmer organizations: associations and cooperatives:** Some 1,800 Associations and 300 Cooperatives can be found in the project target provinces. The vast majority of these organizations, are not legalized. The combined cooperative and association membership is over 230,000 persons of which 57% are women. These organizations are of major importance and should be seen as the entry point for community development in the project areas.

Table 26: No. of Associations and Cooperatives

	No. Associations	Legal Status		No. Members		
		Legal	Not Legal	H	W	Total
Zaire	181	2	179	1 805	1 738	3 543
Uíge	1 024	0	1 024	53 837	71 406	125 243
Bengo	187	0	187	4 403	5 266	9 669
Cuanza Norte	485	1	484	28 058	40 179	68 237
Total	**1877**	**3**	**1874**	**88,103**	**118,589**	**206,692**

Source: IDA, 2016

	No. Cooperatives	Legal Status		No. Members		
		Legal	Not Legal	H	W	Total
Zaire	85	6	79	1 170	1 235	2 405
Uíge	10	8	2	2 908	1 433	4 341
Bengo	108	22	86	3 290	3 232	6 522
Cuanza Norte	100	2	98	4 752	7 269	12 021
Total	**303**	**38**	**265**	**12,120**	**13169**	**25289**

Source: IDA, 2016

34. **Climate change risks:** Agriculture in the humid northern provinces is also vulnerable to climate change with increased temperatures, lower rainfall and a shorter growing season. The effect is lower crop yields and waterlogging during periods of prolonged rainfall. A climate risk analysis undertaken by the Africa Climate and Development Initiative illustrates the effects of climate change such as reduction in the length of growing seasons.

35. Some climate change risks and potential impacts on the livelihoods sources in the targeted provinces are summarised below. SREP will aim to build the resilience to these stresses.

Livelihood system	Climate variable	Potential impacts
Crop production	Rising temperatures Increased rainfall variability Increased rainfall intensity	Increased incidence of pests and diseases, low crop yield; changing cropping calendar/dates, late harvest, crop failure, gully & sheet erosion, loss of farmland and soil fertility, water logging leading to the loss of deep rooted crops; increased sedimentation; siltation of water bodies
Livestock production	Increased variability in rainfall patterns: Rising temperature Increased intensity of rainfall	Lack of water availability for livestock; reduced forage availability; poor livestock health linked with heat stress which reduces the market value of affected livestock, reduction in livestock productivity; loss of livestock; loss of pasture land and; increased incidence of diseases

36. The main hazards are excessive rainfall, flooding, strong winds and storms, human-wild life conflict, crop pests and diseases, such as cassava mosaic and low prices of crops especially of coffee. However, cassava production is seen as an insurance against food insecurity, during years of general crop failure. The main coping strategies include increased collection of wild foods, increased sale of local crafts and reliance on external cash remittances, sales of livestock and reliance on self-employment such as trade.

Table 27: Climate risk analyses on main crops in SREP - NORTE

Crop	Suitability	Climate risks	Opportunities	Adaptation options
Cassava	Extensive areas of suitability	Moderate increased temperature may reduce productivity due to plant stress. Inundation after heavy rainfall may increase susceptibility to soil pathogens. Increased temperature may increase spoilage of tubers and flour.	Widespread staple crop, generally considered to be climate-resilient relative to other rain fed staples. Comparatively less vulnerable to unpredictable rainfall. Can be harvested at any time to meet short-term food security needs	Promotion of pathogen-resistant and water-tolerant cultivars. Promotion of improved post-harvest storage and processing.
Coffee robusta and arabica	Extensive areas of marginal to moderate suitability in the interior highlands.	Moderate Vulnerable to increased heat stress and drought. Suitable area may be reduced due to increased temperature at low altitudes	Already widely grown, considerable potential for expansion.	Prioritise engagement with private sector to support research & development, strengthening of value chain. Promotion of multiple varieties of robusta and arabica in the same production areas to reduce exposure
Sweet potato	High to excellent in the interior, unsuitable in the arid lowlands and coastal region.	Low to moderate Considered to be climate-resilient, however suitable range may be reduced by temperature increases and drought in the s	Promote as a climate-resilient, easily grown perennial crop (particularly as an alternative or complement to cassava). Promotion of improved post-harvest storage and processing.	
Banana	Extensive areas of marginal to moderate suitability for Cavendish table	Low to moderate Considered to be climate-resilient, however suitable	Considerable area with suitable potential	Promotion of pathogen-resistant and water-tolerant

Crop	Suitability	Climate risks	Opportunities	Adaptation options
	banana, marginal suitability for cooking plantain, marginal suitability for hybrid cooking plantain	range may be reduced by temperature increases and drought in low-lying areas. Inundation after heavy rainfall, increase temperature, may increase susceptibility to soil pathogens.	which is currently underexploited	cultivars. Promotion of irrigation for plantation-scale producers. Prioritise engagement with private sector to support research & development, strengthening of value chain.
Maize	Extensive areas of high to excellent suitability for all varieties of maize in interior midlands and uplands. Unsuitable in the arid lowlands and coastal region. Planting season is limited to October – November.	Moderate to high Vulnerable to variability in onset and duration of rainy season, drought in low-lying areas.	N/A	Promotion of improved drought-tolerant varieties. Increase access to weather forecasts and early warnings. Promotion of sorghum, millet as climate-resilient maize.
Millet and Sorghum	Extensive areas of good to high suitability in interior midlands and uplands. Marginally suitable in the arid lowlands and coastal region during the late rainy season (December – January).	Low to moderate Considered to be climate-resilient, however suitable range may be reduced by temperature increases and drought in the south	Large potential area of high suitability, noted as climate-resilient alternative to maize.	

Appendix 14: Food security and Nutrition

1. **Background:** The SREP design mission took stock of the lessons learnt and challenges encountered in integration and implementation of nutrition mainstreaming in the on-going programmes both IFAD-funded (AFAP, SAMAP, ARP) and other development programmes in Angola. SREP is aligned with the objective of an upcoming RB-COSOP for Angola- *contributing to the sustainable and inclusive transformation of family farming, to raise incomes and improve food security.* The SREP design also took into consideration the IFAD corporate priority on horizontal integration of nutrition with gender, youth and climate change issues. The proposed interventions for SREP include: (i) construction and rehabilitation of infrastructure (ii) develop capacity of project management and the technical capacity of government staff and service providers (iii) target interventions at youth, women, former combatants, people with disability and the most vulnerable individuals and households.

2. **Nutrition objective:** The goal of SREP is to contribute to improved food and nutrition security of the targeted households. Given the harmonization of **SREP** with ARP and SAMAP, the nutrition focus in the project will align with the explicit nutrition objectives in ARP (*to ensure food security and increase incomes, particularly among the most vulnerable groups in food and nutrition-insecure areas of the central highlands and littoral zones*); and SAMAP (*to diversify the economy, generate revenue and improve livelihoods and food security of poorer households*). Nutrition mainstreaming in SREP will aim at improving food security and contribute to safe, diverse and nutritious diets of the farming families in the two locations: i) the four northern provinces of Bengo, Zaire, Uige and Cuanza Norte, and the three southern provinces of Benguela, Namibe, and Cunene.

3. **Food and Nutrition situation:** Despite the significant progress in reducing food insecurity and proportion of undernourished people in Angola, stunting, child mortality, adult obesity and child overweight have remained on the rise in Angola. According to SOFI[78] report (2017) the prevalence of food undernourishment reduced from 32.1% to 14% in 2016. However, the 2016 Multiple Indicator and Health Survey in Angola (DHS, 2016) showed that more than one-third of children under five are stunted (38%) at national level. Higher stunting prevalence was recorded at rural (46%) compared to urban area (32%). This prevalence has varied ranges by province from 22% to 51% (see below figure). Anaemia is also a public health concern with 65% prevalence among children aged 6-59 months. This challenge is associated to poor child feeding practices, poverty and education status of mothers. In 2011, a household food survey (UNICEF, 2011) showed that 9% of households were having only one meal a day, and in the poorest wealth quintile, only 18% of households were having three meals a day. It was also estimated that in the poorest quintile, 25% of households consumed meat at least once a week.

4. The SRP design mission underscored the dearth of data on food security in Angola. The current assessment on food security was conducted only in the Southern provinces and the data is yet to be available later in the year, 2018. The main causes of poor nutrition in Angola include:

5. **Poor dietary diversity**: low intake of iron-rich foods and other micronutrient rich foods due to food inflated prices, poor availability and consumption of vegetables, fruits; inadequate intake of pulses and animal based foods, and lack of knowledge in improved food processing techniques.

[78]SOFI (2017): FAO, IFAD, UNICEF, WFP and WHO. 2017. The State of Food Security and Nutrition in the World 2017. Building resilience for peace and food security. Rome, FAO. 11

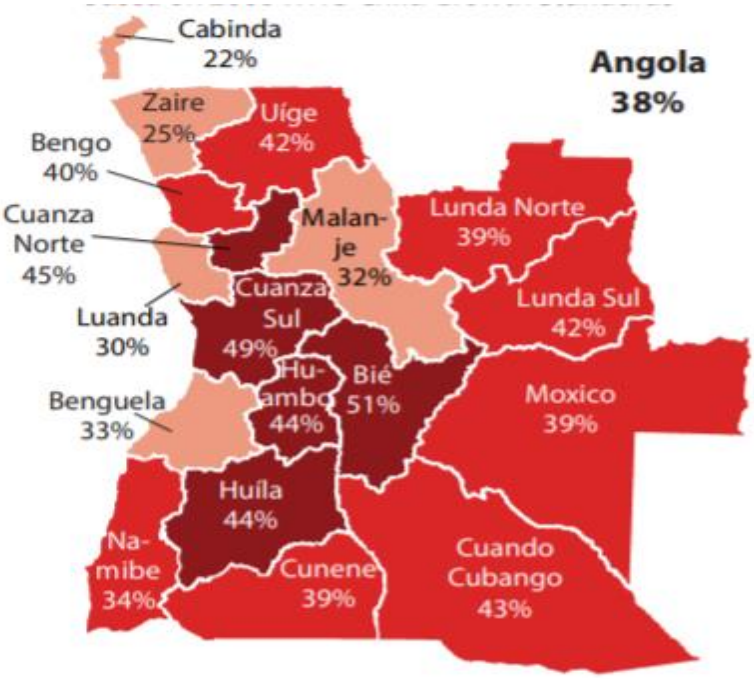


Figure 18: Stunting by Province (The 2016 Multiple Indicator and Health Survey in Angola)

6. **Education and income status of women**: The Multiple Indicator and Health Survey (2016) demonstrated that Stunting decreases with increasing mother's education and household wealth. In Angola, 35% of households are headed by women and 35% of adolescent women (age 15-19 years) have begun childbearing. Most of the national population (51%) is under age 15 with 29% already having children as mothers. Teenage childbearing was found twice as high among young women with no education (58%) than among women with secondary or higher education (25%).

7. **Poor sanitation and hygiene practices**: More access to an improved source of drinking water was found among the households in urban areas (two-thirds) as compared to only one-third of rural households.

8. **National capacity to act on food insecurity and malnutrition**: The FAO food security commitment and capacity profile (FSCCP) tool identified the development of capacities as one of the most critical issues for Angola in terms of their commitment on food insecurity and malnutrition. Institutional capacity to improve food security and nutrition such as staff size, extension coverage, training and skill acquisition are inadequate.

9. **Environment and climate change**: Angola has recorded persistent drought that affects the national food production and aggravated food security particularly in the rural populations. These are associated to poor cereal harvest, reduction of productivity and loss of livestock.

10. **National policies and strategies:** The country's food security and nutrition policy and programme portfolio is comprehensive with the legislation addressing food security and nutrition issues and the Parliament ensuring Rights to Food are legally in place. The National Strategy for Food Security and Nutrition (ENSAN) was formulated in 2009 with support from FAO and other partners. In 2010, ENSAN was integrated with other relevant social programmes including the National Strategies to Combat Poverty (ECP) into an integrated Municipal Program for Rural Development and Fight against Poverty[79] (PMIDRCP). The PMIDRCP includes nutrition objectives with complementation of social protection outcomes. The priorities of the agricultural sector in Angola focus on the family agriculture, in particular, the support to the rural women. This provides a new positive context for re-launching the ENSAN based on Family Farming and support for Rural Women. The Government of Angola created the National Health System, the National Council for Children

[79] Programas Municipais Integrados de Desenvolvimento Rural e Combate à Pobreza

Commissions and the 11 Commitments for Children, the National Food Security and Nutrition Strategy, coordinated by the Food Security Office (GSA) within the Ministry of Agriculture with efforts from multiple sectors. The National Food and Nutrition Policy is under development, coordinated by the National Directorate of Public Health's Nutrition Unit in collaboration with the Ministry of Agriculture, Ministry of Social Services, UNICEF, WHO, FAO, World Vision and other partners.

11. **Nutrition Activities:** Nutrition mainstreaming will explore entry points in the two technical components of each of the sub-project: *i) capacity building and ii) project investments*. The PDO- *increased production and resilience of farm households* and the SREP goal- *contribute to improved food and nutrition security in rural households* will be supported with indictors for food security (*Food Insecurity Experience Scale: FIES*)[80] and nutrition (*Minimum Dietary Diversity for women of reproductive age: MDD-W*)[81].

12. The expected outreach on food security will be 218,000 households- the SREP target beneficiaries while nutrition mainstreaming will target 40% (87,000 households; about 522,000 persons). In line with the project targeting proportion for the two regions, the target nutrition outreach in the north will be 417,600 (80%) and in the south , 104,400 persons. Priority will be focus on project interventions targeting women, adolescent girls, people with disabilities and households with malnourished children.

13. Nutrition mainstreaming approach will adopt two impact pathways known as "own production pathway" and "income pathway" to influence food security and contribute to safe, diverse and nutritious diets of farming families. These two pathways will be mutually integrated taking into consideration the gender and climate initiatives in the project interventions as influencers to maximize impact on nutritional outcomes. **The theory of change for good nutrition outcomes** is anchored on the support to increased availability and consumption of nutritious and diverse-foods; increased knowledge and awareness on nutrition, sanitation and hygiene practices; skills on improved food preparation, preservation and processing; and income growth as a vehicle to healthy eating and improved family diets.

14. **Proposed nutrition activities**: The proposed three main nutrition activities will be integrated in the interventions for the north: i*) Institutional strengthening for improved services to family farmers; ii) Investments in production, diversification and marketing in support of family farmers and household members*], and for the south: ii) *Strengthening adaptive capacity for improved services to family farmers; and ii): Investments to build resilience of family farmers*].

15. **Nutrition education and training of extension workers:** The entry points for this activity is sub-*component 1.1, 1.2, 2.1 and 2.2.* The nutrition activities would build on the lessons learned on similar training activities in ARP and SAMAP as well as align with the national programmes of the Ministry of social action, family and promotion of women (MASFAMU)**.** The identified gaps and constraints highlighted in the on-going programmes will be addressed and strengthen by SREP. For instance, the MASFAMU *led national programme for Rural women is* organizing women into groups and facilitate engagement in FFS; organized cooperatives for people with disabilities and provide supports on land issues, transportation and access to market. However, the implementation of cooking demonstration has been stopped due to lack of resources.

16. **Nutrition education** will focus on promoting healthy eating through income growth interventions, own production and awareness raising on food diversification through kitchen gardens for readily available vegetables, fruits and animal-based foods. The approaches for awareness raising will include the use of drama, TV, radio IEC materials in communities. This activity would be implemented by service provider in collaboration with MINAGRI, MASFAMU, and ministry of health.

[80] FIES consists of eight questions regarding people's access to adequate food: 1) You were worried you would not have enough food to eat?; 2) You were unable to eat healthy and nutritious food?; 3) You ate only a few kinds of foods?; 4) You had to skip a meal?; 5) You ate less than you thought you should?; 6) Your household ran out of food?; 7) You were hungry but did not eat?; 8) You went without eating for a whole day?

[81] MDD-W: Minimum dietary diversity indicator for women of reproductive age (15-49 years) is a diet quality indicator associated with micronutrient adequacy of diets

17. **The trainings of extension workers** on nutrition will be implemented through the FAO led FFS and pastoral field Schools (PFS). The available curriculum on Food and Nutrition will be reviewed and updated by a consultant (nutrition expert) taking into consideration the findings from recent food survey on food practices and nutrition situation. Also, nutrition education will include the element on nutrition relevance to climate resilient productivity and alternative livelihoods for resilience (*component 1 and 2 for both sub-project Norte and Sul*). There is need to link climate change interventions to nutrition given the growing adverse climate change impacts on food security and nutrition outcomes. For instance, the climate mitigation and adaptation strategies including mixed crop, improved varieties and livestock systems improve the nutritional quality of food. And the early warning systems enable farmers to produce and store sufficient food in the face of extreme weather events in order to avoid food insecurity and unhealthy food consumption patterns.

18. Lessons can be drawn from an IFAD programme (PSP-Mozambique) which has demonstrated that FFS is a simple and sustainable approach for improving nutrition of the rural communities. Thus, SREP will support nutrition capacity of the extension workers through workshops, training on the updated curriculum and participation in refresher courses.

19. **Support on the multi-sectoral coordination mechanism for Home grown school feeding:** The entry points for this activity is *Component 1.1 and 2.1: Strengthening of capacities at national level.* The purpose of this activity is to promote healthy eating through the support on coordination mechanism for the national school programme. The recent UNSCN (2018) review on UN system in Angola highlighted that coordination mechanisms involving various sectors of the line ministries is in need of reinforcement.

20. The design mission was informed that key responsibilities of the ministry of Education are beyond education, including social issues, health and nutrition. The ministry of education is currently implementing national school meal programme which involved food items such as biscuits. However, the schools noted the need to optimize the use of local and home grown foods in addition to improved recipes because school children often reject the monotonous and poor diet served in school which were not different from what they have at home.

21. Therefore, SREP activity will support coordination on the school meal programme with the other line Ministries through technical assistance. Each target school will be linked to the extension services to promote nutrition education and hygiene practices. This activity will facilitate engagement with MINAGRI, MASFAMU and the community health officers to promote health issues and healthy eating. The training of cooks on improved recipes will target women and adolescent girls within the communities. This activity will build on the lessons learnt from RBA collaboration on Home Grown School Meal programmes in other countries. Identification of beneficiary schools will focus on the public schools within the project target areas and consideration of the overall nutritional status of the children in the given regions, and possibly, if data is available- presence of malnourished and poor children as well as poor school attendance. This activity will target at least 2 public primary schools per 35 municipalities in the 7 provinces. The selection of the schools will be within the vicinity of FFS or farmers association to ensure regular support from extension workers and on productivity.

22. **Comprehensive food survey (KAP):** This activity on food survey and monitoring of food security and nutrition outcomes will be integrated in component 3. There is available data on nutrition situation but dearth of information on the food practices and dietary pattern in Angola and particularly, the project locations. The mission noted that the only available survey on food knowledge, attitude and practices was conducted in two provinces (Benguela and Huila) by World Vision. This underlines the need for SREP to undertake a comprehensive food survey-Knowledge, Attitude and Practice (KAP). The World vision, Angola is a potential service provider to conduct this KAP survey in building on the already established approach in Benguela and Huila provinces. The survey will collect baseline data to guide the implementation of nutrition activities and contribute to national information system, monitoring and data on food and nutrition security situation for decision making. The UNSCN (2018) review in Angola reported that despite the successful UN implemented joint efforts on nutrition in the country, it was difficult to ascertain the extent to which such efforts have impacted overall nutrition outcomes due to lack of nationally aggregated data.

23. **Operational plans:** SREP will have a nutrition focal point in the SCU to facilitate and coordinate the implementation of the nutrition activities in collaboration with the identified potential service providers, NGOs, RBAs, other development partners and qualified consultants (nutrition experts). The focal point will be tasked with the responsibilities of regular tracking and documentation of progress on nutrition. To ensure effective implementation on the nutrition sensitive activities, the extension workers will be supported on regular trainings and refresher programmes on nutrition-sensitive interventions.

Appendix 15: Agricultural support infrastructures

A. Introduction

7. The project will develop a series of infrastructure to support the main components, including: Small scale irrigation schemes and small scale water harvesting facilities, market facilities and road infrastructure. In addition to these, under institutional support to the Ministry of Agriculture, offices and residential houses of extension staffs will be rehabilitated and constructed. The following gives a more in-depth description of the development process of each type of infrastructure targeted.

B. Houses/buildings

8. In order to improve working conditions of extension staffs in the targeted area, the project will improve the physical conditions of offices and houses at municipal levels (**Table 2**). This will be done through the following: i) rehabilitation of 16 offices (11 in the north and 5 in the south) and construction of 16 new ones (8 in each area of the project) and; ii) rehabilitation of 11 residential houses for extension staffs (7 in the north and 4 in the south) and construction of 21 new ones (12 in the north and 9 in the south). Each of these will be provided at the level of the municipality. The following gives details on overall development process:

9. **Design and supervision of works.** BoQs of offices and residential houses are already available, including drawings and technical specifications that were used by MOSAP I and are planned to be used for MOSAP II (**Figure 1**). This can be referred as prototypes to be updated, taking into account some improvements to incorporate in order to meet with some operational needs (increased number of staffs) of SREP. The use of such prototype will contribute to: i) reduce the overall construction cost (no need to spend for design) and; ii) reduce the time required for the construction process. These improvements will include the following among others:

(a) For offices: i) use the space initially provided for the laboratory as an office for the third extension staff; ii) provide a permanent source of water (borehole with simple water lifting system) in case of absence of water system in the area; iii) provide a permanent fence to secure the place;

(b) For residential house: i) increase the space of the bedroom next to the dining room by aligning the wall to the one of the smaller bedroom and make it self-contained (by providing a toilet); ii) provide a small storing room in the kitchen by increasing the space and; iii) include a door at the kitchen that takes to the dining room; iv) provide a permanent source of water (borehole with simple water lifting system) in case of absence of water system in the area; v) provide a permanent fence to secure the building.

10. For new constructions, the project Engineer will be responsible for updating the existing drawings, according to the guidance provided above. For existing building, he will make a thorough assessment of the physical state of each building office and develop BoQ accordingly for further rehabilitation works.

11. Supervision will be carried out by the project Engineer, in collaboration with Resident Engineers of each Province where a building is located, through regular missions and field visits. An overall result-based MoU signed between the project and each province will provide more details on this partnership, including roles and responsibilities of each Provincial Engineer.

12. **Construction/rehabilitation works.** Developed BoQs of each building will be advertised and contractors will be recruited following a competitive approach, to perform with the construction/rehabilitation works. Based on possible lessons learnt from other project (assessment to be done by the SCU prior to activity launch), lots will be arranged to ease and fast-track the progress of works. Prior to awarding contracts, a quick capacity assessment of each contractor (equipment, human resources, financial, etc.) will be carried out by the project. Each contractor should be allocated a limited number of sites to reduce any risk of unaccomplished works. Drawing from the experience of MOSAP I, the average unit cost of construction of these buildings is USD 300,000 and

200,000 respectively for a residential house and office. Rehabilitation costs have been estimated to 1/3 of construction ones.

13. **Hand over.** After completion of works, each premise will be under liability period of not more than one year, during which all snags highlighted during reception will be addressed. After the liability period, all facilities will officially (with written proof) be handed over to the respective authorities for further use and management.

C. Road infrastructure development

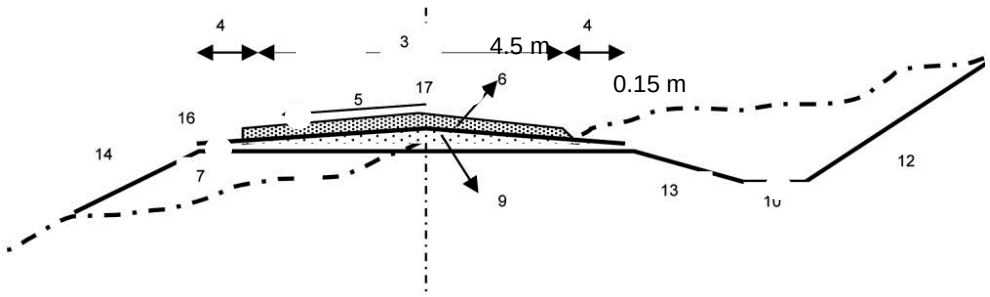
14. Road infrastructure will be developed through various activities including rehabilitation and maintenance. It is expected all rehabilitated roads will be maintained by the project. Maintenance will involve both routine and periodic activities. In order to sustain road works, the project will: form and support road gangs on each rehabilitated road and develop Provincial road maintenance plans.

Road rehabilitation

15. Climate resilient road infrastructure will be developed in all targeted provinces, to ensure connectivity is provided between production areas/sites and markets. The project will rehabilitate (full rehabilitation) around 800 km of Feeder (tertiary) roads: 400 km in the north and 110 km in the south. Drainage structures (exclusively culverts) will be provided on selected secondary roads to ensure that farm products taken to markets are effectively conveyed on time and in good quality. Road development activities will start from the first year of the Project lifecycle to expect early results and increased impacts. Synergies and collaboration with other stakeholders involved in this sector will be capitalised.

16. **Identification, selection and prioritisation.** The development of Feeder roads will be demand-driven, in line with the needs/requirements of main project activities/components. The identification, selection and prioritisation of roads will be participatory throughout its process, involving communities, local government and the road authority. For identification of Feeder roads, the needs of targeted farmers and FBOs as well as priorities from Local Government (Provincial Development Plan), will be considered (eligibility criteria will be developed and applied at levels of Communes, municipalities, Provinces and SCU). Roads selection process of all identified roads will be submitted to a multi-criteria ranking and evaluation process including technical, socio economic and environmental aspects. All selected roads will be prioritised for further rehabilitation.

17. **Survey and design.** Private consultants will be recruited on a competitive basis to survey and develop designs of selected roads prior to their rehabilitation. The country is under the "***SATCC Standard Specifications for Road and Bridge Works***" for the development of all types of roads, including Feeder (Tertiary) Roads. Given that they refer to low traffic ones, the recommended specifications are: 4.5 m wide and 15 cm thickness of the gravel layer.



18. The overall survey process of selected roads will be participatory and inclusive, to ensure sustainable designs are provided. Surveys will include among others hydrological and topographical investigations to incorporate, and will consider unexpected hazards resulting from overflowing in the designs. This will result in engineering design, dimensioning and locations (road profile and line diagram) of structures (including drainage system) and other measures in view of customised standards and will contribute to safe road infrastructures. During design, various technological

measures will also be envisaged, contributing to reduce the consequence of erosion and other effects of water on road infrastructure, particularly due to extreme climatic events as a consequence of climate change. All measures to ensure safe roads developed (including roads/traffic signs) will also be envisaged. A socio-environmental management plan (SEMP) and checklist will be developed following proper Environmental Impact Assessment. The plan will guide and ensure construction/rehabilitation works are sustainable. For each road, a full Request for Proposal Documents (RFD) will be developed, ready to be used for further procurement of works. This will include BoQ (incorporating line diagrams), drawings, scope of works, etc.

19. **Procurement.** Lots should be arranged to ensure easiness of works, including altogether earthworks and structures on the same road. The SCU will be responsible for procurement and manage all contracts. It is expected that the planning of procurement process will favour effective start of works from the beginning of dry seasons. To expect high performance in the delivery of contractors, some selection criteria to be considered will include: (i) ownership of minimum required equipment; (ii); minimum years of experience (five in similar agro-ecological area and ten in road construction); (iii) qualified and available staffs. Contract duration will be of not more than nine months coinciding with dry season.

20. **Rehabilitation works.** They will be carried out (on all surveyed and demined roads) by qualified contractors hired on a competitive basis. Works will be done following the equipment-based approach. All roads will be fully rehabilitated along their entire stretch. All targeted works will be guided by technical specifications provided by the survey and design. Both earthworks (body of the road) and structures (drainage structures and bridges) will be concerned. Before start of works, an updated timeline of activities will be developed as a monitoring tool to monitor work progress. According to the road authority of the Ministry of Construction and Public Works, the unit cost for rehabilitating Feeder roads is around USD 40,000 per km (on an average of 2 to 3 pipe culverts per km). During rehabilitation/construction activities, relevant indicators and data (dealing with participation and contribution of beneficiaries) will be collected by the Project staffs for further monitor and evaluation purposes, using a series of tools developed prior to start of works.

21. **Road mapping.** All roads will be mapped in a very comprehensive way, including not only socio-economic information (population, social centres, etc.) but also characteristics of all structures along the roads (location, dimensions, cost, etc.). This will be produced at the level of each District and County.

22. **Supervision and follow up.** The consultant/firm that designed the roads will be responsible for supervising targeted works. It will be expected that one supervisor will be stationed on each roads/site (not more than two closed roads) to ensure works progress is in line with technical specifications of the BoQ and meets with the initial timeline developed for monitoring purposes. This will also ease the timely decision making process of any possible improvement/change during works. Both Project and Province Resident Engineers will undertake regular (depending on the sequence of work progress) field visits and take part to site meetings for assessing work progress against the timeline and BoQ. Authorities of the national road institute (MCPW) will also be involved during filed visits. Each follow up mission will be clearly documented, highlighting recommendations made to improve works. A result-based MoU will be signed with the Provincial office to cover the supervision activity and prepare for hand over. The involvement of local government will be compulsory at each level, from the initial stage of roads development. This will contribute to increase their level/sense of ownership as well as synergies (in actions) with other stakeholders.

23. **Defect liability and hand-over.** A maximum of one-year defect liability period will be given to the contractor, during which all abnormalities and snags will be addressed. After this period, all roads will be officially (by written) handed over to the respective local governments for further management. Municipalities have the entire responsibility over all Feeder roads in the country.

24. **Impact assessment.** It is expected that investments put into the rehabilitation of targeted roads will end up in positive impacts in the lives and environment of beneficiaries. As the most important

investment activities of the Project, it will be useful to gather and catch most aspects linked to the rehabilitation/construction of these roads. Socio economic information resulting from the involvement of communities (as unskilled labour or selling of aggregates) will be collected for the sake of further impact analysis of these activities.

Road maintenance

25. **Routine and periodic maintenance works.** All rehabilitated roads will be maintained by the project. Maintenance will include both routine (every year using labour-based approach involving road gangs) and periodic activities (three years after the rehabilitation/construction, following equipment-based approach). A total of 1,350 km will be routinely maintained (800 km in the north and 200 km in the South) and 350 km will be periodically maintained (200 km in the north and 150 km in the South). All road maintenance works should be carried out during a period between the end of the rainy season and the beginning of dry season (usually the start of the commercialisation campaign). Periodic maintenance activities should be carried out following the procurement process described above. All BoQs will be developed by the Project Engineer in collaboration with the Provincial Resident Engineer. A private company will be hired on a competitive basis to carry out maintenance works according to the specifications provided. Monitoring tools will include BoQ and chronogram activities. Unit costs for periodic and routine maintenance are around USD 20,000 and 4,000 per km. This is an estimation agreed with the road authority as very little information exists on this area.

26. **Road gangs.** Community mobilisation/engagement for road maintenance is not too common in the country and there is not enough information made available on the issue. It is expected that, for routine maintenance works, villagers along roads will be mobilised, organised and capacitated to carry out regular routine works. Prior to this, an assessment will be carried out to evaluate all prerequisite and conditions (sociocultural, economic, demographic, etc.) for a successful application of this approach in all targeted areas. When possible (existing evidence), one Road Management Committee (RMC) will be formed, capacitated/trained (social and technical skills) and supported (distribution of light equipment to carry out maintenance) on each road, prior to rehabilitation/construction works. They intend to be an indispensable interface to the sustainability of road development process. It is expected that, by involving them at a very early stage of the rehabilitation process, they will be helpful and capitalised during routine maintenance activities for which they will play a leading role in mobilising the road gangs members.

27. **Development of Provincial Feeder road management plans.** The Project will support provincial governments in developing Feeder Road Management Plans (FRMP) as a key tool for decision making in the overall management of mobility and accessibility in the County. These plans will include (and not limited to) prioritised actions to sustainably improve integrated access in the County, taking into account all existing modes of transport. It is expected that the developed FRMP will serve as a master plan and a guide to any further activity to improve access in the Counties. A private consultant will be hired on a competitive base to carry out this assignment.

D. Market facilities

28. They will be provided by the project mainly as storages facilities (warehouses) for agricultural commodities. The development process of these assets will include the following steps:

29. **Studies, design and supervision.** Prior to the development of these facilities, an assessment of the market organisation and settlement pattern will be carried out, to identify the type of facilities to construct and the location of each. Based on the storage capacity indicated by the various studies, BoQs will be developed, including drawings and other technical details. It is expected that targeted facilities should be used to store more than one commodity of the same nature (dried, fresh, etc.) for more efficiency of the assets. They should be of various sizes (small and medium), depending on the storage capacity (and the value chain and market analysis assessment done in advance) and should include different areas/compartments dedicated for storing: agricultural commodities, inputs (pesticides, fertilisers, etc.), equipment and office. The layout out process of the warehouses should take into consideration key factors (air circulation, light orientation, circulation inside the warehouses,

protection against rats, etc.) determining the storage conditions and the quality of the stored commodities. A private consultancy firm will be recruited on a competitive basis to: i) carry out the market study (leading to the types, the number and dimensions of the storages); ii) develop the BoQs to be used for the construction. A single BoQ will be developed for each type of warehouse identified and will be used as a prototype to be constructed in all sites. This approach will be cost effective and time saving for the project.

30. Prior to the construction of each storage facility, the following will be assessed: i) an existing critical mass (a group of beneficiaries that are able to handle the use and management of the constructed facility); ii) availability of land (good accessibility, technically suitable for construction, enough space to accommodate with the structure, etc.) as a guaranteed; iii) existence of good quality construction material; iv) links with other project activities (for synergies) in the area. Land to build the asset will donated by the beneficiaries as their contribution, through a written commitment.

31. Supervision of construction works will be ensured by the private consultancy firm that developed the BoQs, jointly with the Project Engineer and the Provincial Resident Engineer. This will be done through regular field visits sanctioned by documentation on the overall progress of works.

32. **Procurement.** Lots should be arranged to ensure easiness of works, including altogether earthworks and structures on the same road. The SCU will be responsible for procurement and management of all contracts. It is expected that the planning of procurement process will favour effective start of works during indicated period.. To expect high performance in the delivery of contractors, some selection criteria to be considered will include: (i) ownership of minimum required equipment; (ii); minimum years of experience (five in similar agro-ecological area and ten in road construction); (iii) qualified and available staffs. Contract duration will be of six months coinciding with dry season.

33. **Construction works.** The facilities will be constructed by private contractors hired on a competitive basis, following to the technical specifications provided by the BoQs. The selected contractors will be of best performance with evidence of owned capacities (equipment, personnel, financial) to ensure they reach the construction objectives on time. It is expected that construction works will be a source of creation for local employment and will genuinely generate revenue to the beneficiaries, as well as building their capacities. Another aspect of the participation of local people is foreseen through collection of local materials (aggregate, water, etc.) sold to contractors (whenever it will be possible). During construction activities, relevant indicators and data will be collected by the Project staffs for further monitor and evaluation purposes, using a series of tools developed prior to start of works.

34. **Liability period and hand over.** After construction, each infrastructure will be under liability period of a year, during which all snags identified during reception will be addressed. After liability period, each asset built will handed over to the Beneficiaries/Municipality.

35. **Management of the assets.** For the sake of sustainability, the project will ensure that beneficiaries are organised and capacitated in order to manage the new assets. For each storage facility built, beneficiaries will be trained and equipped on simple management rules (maintenance, running costs, functioning, commodity management, etc.) to ensure it will last longer. Given that very little in the country is known about community/group management of infrastructure, an assessment of potential successful stories existing in the various targeted communities will be done.

E. Water infrastructure

36. The project will develop schemes for small scale irrigation (SSI) as well as small scale water harvesting infrastructure (to collect and make available for multipurpose water). All targeted SSI schemes will be rehabilitated, no new construction will be done. However, small scale water harvesting/collection infrastructure will be constructed. These activities will be carried out exclusively in the Southern part of the country, where climate and environmental conditions are more severe. It is foreseen that, for all activities targeted regarding water infrastructure development, only water gravity

system will be concerned. The following steps describe the development process of the targeted activities:

37. **Identification and selection.**According to the Rural Infrastructure Department (in charge of irrigation development) of the Ministry of Agriculture, SSI schemes refer to areas of not more than 35 Ha. A range of small scale water harvesting infrastructure exist in the country among which “Chimpaca” is the most common found. The project will focus on those. Schemes and water harvest infrastructures to be developed will be screened using a list of criteria set up to ensure that investments will contribute of Project goals. For increased ownership, the selection process (including identification) of these infrastructures will be participatory and inclusive. It will start from the very little administrative/traditional units of the country upwards to provinces, and will involve technical (natural resource management and environment, water resource, agriculture, livestock, etc.) and administrative (representatives, traditional, etc.) authorities at different levels. Adequate consultative mechanisms will be used during the process. At the end of the process, a list of SSI schemes and water harvest infrastructures will be provided to the Project for further development. Such participatory approach will contribute to increase ownership at the level of the beneficiaries, hence leading to sustained investments.

38. Criteria to consider for eligibility will include the following areas among others: i) value chain analysis (existing markets to absorb production of at least one targeted commodities); ii) hydrology (existence of sufficient, good quality water and gravity system); iii) agronomy (cultivated farms with potential for high production/productivity, existing agronomical practices and farming system, etc.); iv) topography (use of irrigation by gravity, potential area covered due to optimum alignment of canals, use of cost effective and efficient technology, etc.); v) land tenure system (existing of a certificate of property); vi) socio cultural environment (existing irrigation practices, good level of adoption of irrigation, potential for farmers’ mobilisation, etc.); vii) physical access to the scheme (connexion to the markets), etc. Only schemes meeting the majority of these requirements will be eligible and considered for selection. Eligible sites will go through a selections process (more refined screening) to happen at municipal level. This will be done following prioritisation/elimination approach using ranked criteria. Most important criteria for selection of final schemes (those with high score) will include those related to the overall Project objectives as comparative advantages.

39. **Design and supervision.** This will be done by a private consultancy firm hired on a competitive basis. For the sake of sustainability, the project will adopt a holistic approach to develop the selected schemes, targeting and assessing all combined areas that are critical for their viability, on an individual (isolated) basis and jointly (interactions of areas). Only selected sites/schemes (SSI and water harvesting) will be concerned with this next stage of the process. Feasibility studies will be done using multidisciplinary approach, bringing together various experts on: value chain and markets, agronomy, hydrology, socio economy, topography, geology (soil structure and quality), legal, financial analysis, accessibility, watershed management, etc. Special attention will be given to the development of a Socio-Environmental Management Plan that will be produced following relevant studies on each site (it is a national recommendation for SSI development). The aim is to assess existing potentials, lacks and risks (including environmental ones), and make recommendations on how to mitigate/capitalise them for well-functioning and operating schemes. These studies will be done during appropriate period (considering existing seasonality) for better accuracy and relevance of data collected and their optimum analysis.

40. Based on recommendations made by feasibility studies, all identified measures related to watershed management will be subject to in-depth designs. Detail designs will still be done at scheme level, to ensure viability and sustainability. The design will mainly focus on irrigation facilities/structures (head-water intake, irrigation and drainage network, tail-water ditch, collectors, etc.) and interventions/measures related to watershed management in overall. Auxiliary infrastructures (service facilities like access roads and markets sheds) will not be concerned. The designed layout will allow: i) efficient use of water (use of lined canals); ii) efficient source of water (gravity exclusively); iii) best option for canal alignment to allow maximum irrigated area possible; iv) low

investment cost possible; v) simple and ease (for maintenance) irrigation system, etc. The detailed design will also provide all possible technical and technological options, and will give guidance for selecting the best (good distribution of good quality water) and optimum (investment cost) option to be implemented, while providing rationale for the option chosen. Dimensioning (head-water intake, canals, etc.) and characterisation will also be part of the design exercise, including all related drawings of the system to be adopted. Good quality BoQs will result from this step of the process.

41. Supervision of works is the main responsibility of the firm that designed all water infrastructures. It is expected that, one supervisor will be assigned to monitor and follow up not more than two sites located closely. However, project and Provincial Residential Engineers will be involved in supervising all rehabilitation (SSI) and construction (water harvest) works. This will be done through regular missions and field visits (with site meetings), to monitor the progress made against the technical specifications of BoQs and the timeline provided accordingly. All supervision activities will be documented. The supervision team will have the opportunity to provide instructions (organisation, plans, objectives) if necessary, to the construction process, as well as new orientations in order to improve the construction works.

42. **Procurement.** This should be aligned to national standards. Lots will be grouped in a way to favour a quick and efficient progress of works. Well-performed contractors will be hired after assessment of their overall capacity (equipment, staffs, finances, etc.) to ensure on-time delivery of quality works. All contracts will be managed at the level of the SCU. It is expected that the planning of procurement process should be made in a way to favour effective start of works from the beginning of dry seasons. Contract duration will not be for more than six month duration.

43. **Rehabilitation and construction works.** All selected schemes/sites will be rehabilitated (irrigated schemes) or constructed (water harvesting infrastructure) following technical specifications and guidelines provided by the BoQs. Irrigated schemes will exclusively be rehabilitated, no schemes will be newly constructed. An overall activity chronogram will be developed for each site, as a tool to guide and monitor the progress of works. The process will be highly flexible (but not to allow any delay) to adapt/adjust and align with any existing influencing situation or matter. Performed private contractors will be hired on a competitive basis to carry out targeted works. Very little information is available on existing irrigation development works and costing. However, based on experience from “PROJECTO DE RESILÊNCIA” in the country, the unit cost for rehabilitating a SSI scheme is between USD 10 000 per Ha (for those using gravity system) and USD 20 000 per Ha (for those requiring provision of a well or boreholes). Given that the project will focus on gravity water schemes exclusively, the unit cost of rehabilitation recommended is USD 10,000 per Ha. However, given that water collection infrastructures are of very wide spectrum, a lumpsum amount will be allocated to cover the overall targeted activities. During construction and rehabilitation works, relevant indicators and data (contribution and participation of beneficiaries) will be collected by project staffs for further monitor and evaluation purposes, using a series of tools developed prior to start of works.

44. **Liability period and hand over.** After construction and rehabilitation works are completed, each site will be under liability period of a year during which all snags pointed out during reception will be addressed properly to ensure water is well flowing from one end to another of the scheme. This will be the case with water collection infrastructures. Once the liability period is over, each scheme and water infrastructure will be handed over to the respective community/beneficiaries as a transfer of all responsibilities of with management and accountability towards the scheme.

45. **Operation, maintenance and sustainability.** Sustained water infrastructures cannot be obtained without taking into account the activities related to O&M, which are under the responsibility of well-performed Water User Associations (WUAs). Very little information on the existence and functioning of WUAs exist in the country. The development of those is also a priority of other sister projects like MOSAP. SREP will work closely with those toward a harmonised approach to support the development of strong WUAs in the targeted areas and in the country. Prior to this, relevant assessments will be carried out, as a leading activity regarding the process of making sustainable progress on this. Each scheme and water infrastructure point will be organised taking into account

specific issues related to current functioning and deal with very key issues of water management in an irrigated scheme (water use and distribution, fees collection, conflict resolution, etc.). Support to WUAs will include organisation (grouping beneficiaries if they are not), legalisation (getting a legal status), training (on various aspects of group management including administrative and technical). WUAs should ensure that each scheme is kept at a very good physical condition by providing adequate maintenance. Maintenance includes both routine and periodic. Routine maintenance, carried out each season, will be done to allow good water distribution (quality and quantity) over the command area. This will include: desilting, herbs removal, fixing cracks, etc. on the canals. However, periodic maintenance works, which include heavier works, can be carried out every at least three years. The volume and quantity of these works may require support (technical and financial) from other partners for their implementation.

F. Partnership and synergies

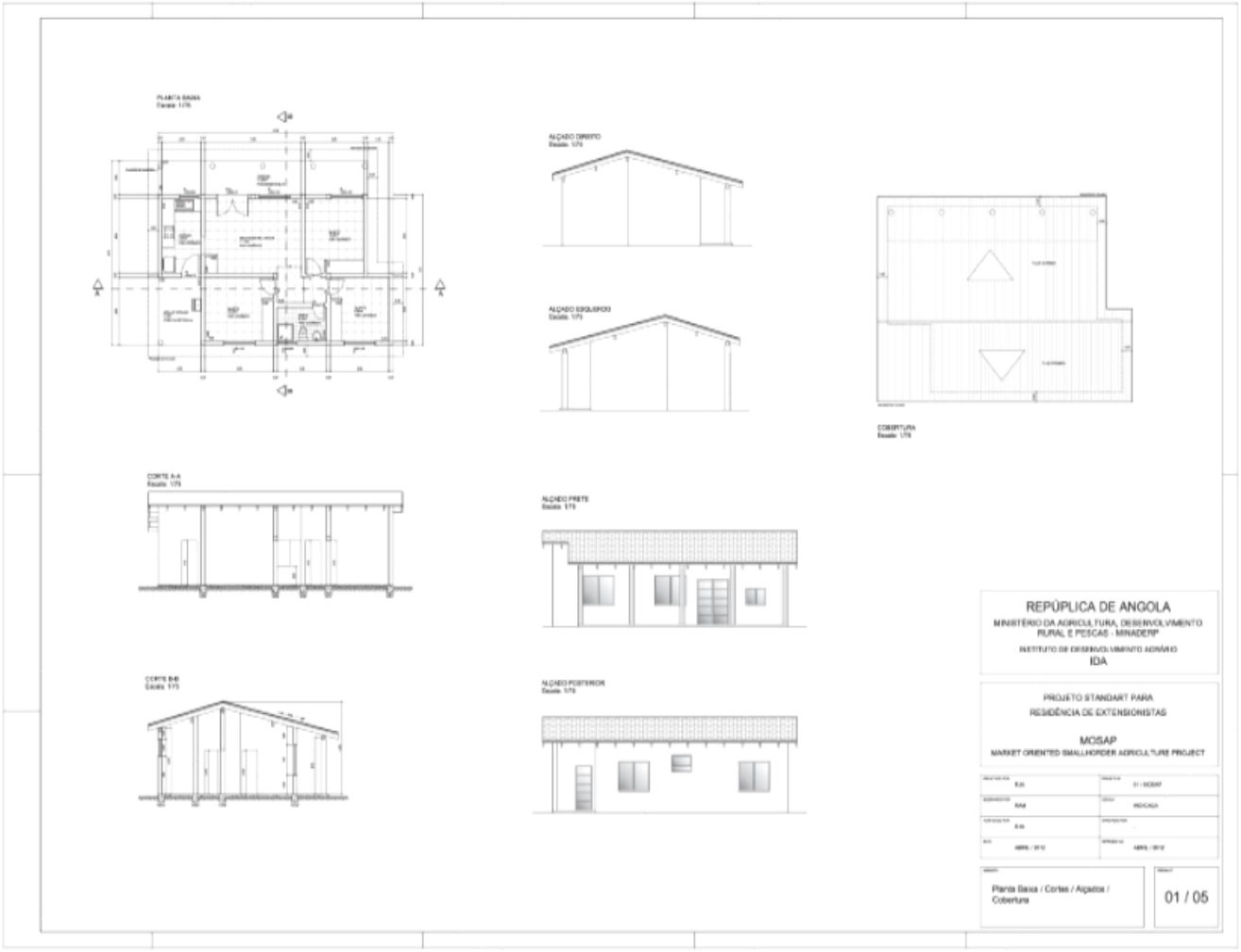
46. The project will partner with different entities as far as infrastructure development is concerned. This will be done through result-based MoUs signed with the following, among others, depending on the type of infrastructure targeted: Provincial and Municipal authorities (for all infrastructures), National Commission for Demining and the road authorities (for roads). It is expected that synergies on various areas will be searched with various other stakeholders for improved results and increased efficiency.

G. Project coordination

47. A well experimented Engineer will be recruited on a competitive base, as technical staff of the Single Coordination Unit (SCU). Among other responsibilities, he will: i) oversee the development process of all project' infrastructures; ii) liaise and ensure permanent follow up with all partners involved in infrastructure activities; and iii) quality assurance throughout all stages of the development process of infrastructure activities.

Annexes

Figure 1: Drawings for offices and residential houses of extension staffs



1.

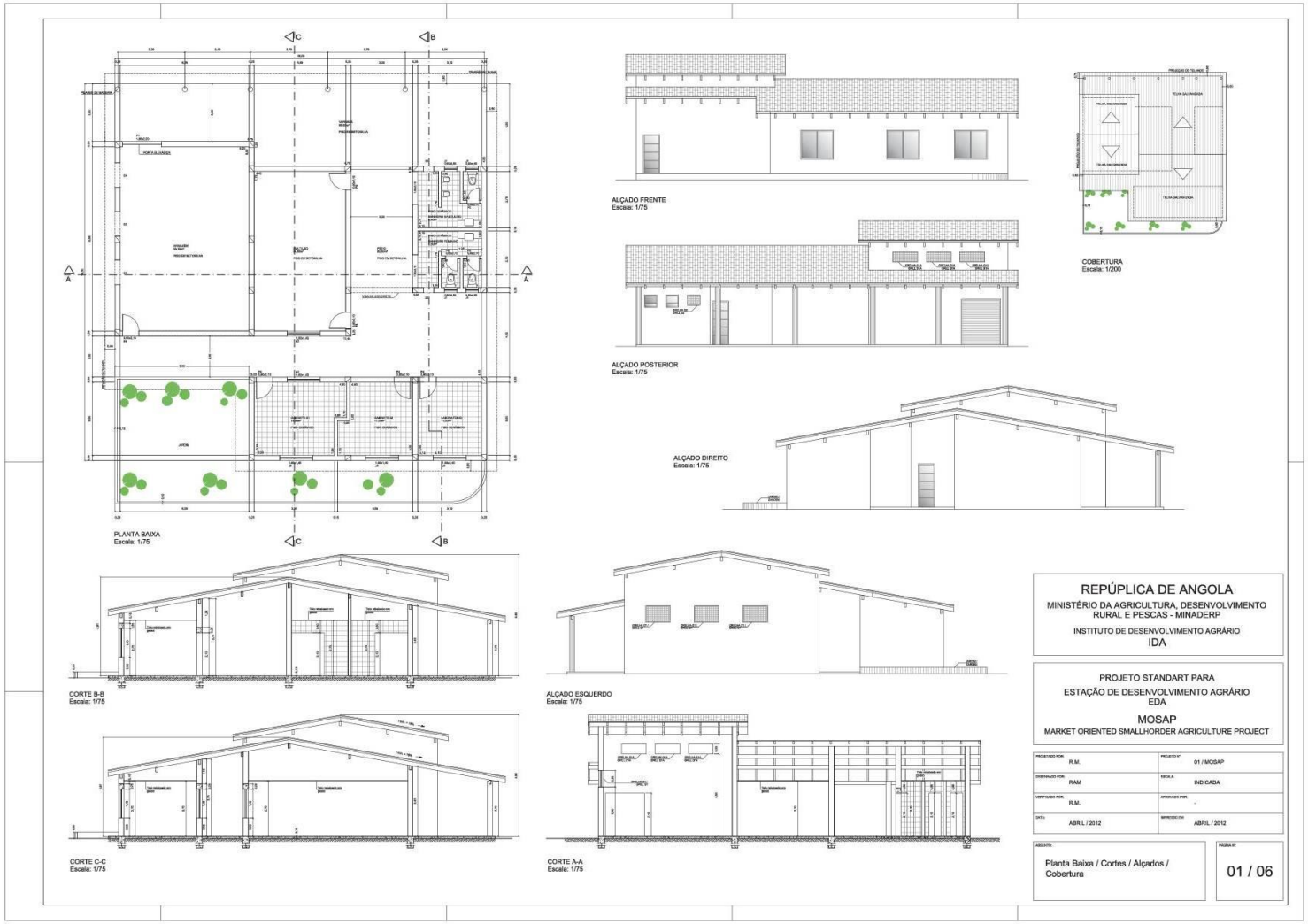

PLANTA BAIXA
Escala: 1/75
ALÇADO FRENTE
Escala: 1/75
ALÇADO POSTERIOR
Escala: 1/75
ALÇADO DIREITO
Escala: 1/75
COBERTURA
Escala: 1/200
CORTE B-B
Escala: 1/75
ALÇADO ESQUERDO
Escala: 1/75
CORTE C-C
Escala: 1/75
CORTE A-A
Escala: 1/75
REPÚPLICA DE ANGOLA
MINISTÉRIO DA AGRICULTURA, DESENVOLVIMENTO RURAL E PESCAS - MINADERP
INSTITUTO DE DESENVOLVIMENTO AGRÁRIO
IDA
PROJETO STANDART PARA
ESTAÇÃO DE DESENVOLVIMENTO AGRÁRIO
EDA
MOSAP
MARKET ORIENTED SMALLHORDER AGRICULTURE PROJECT
R.M.
01 / MOSAP
RAM
INDICADA
R.M.
ABRIL / 2012
ABRIL / 2012
Planta Baixa / Cortes / Alçados / Cobertura
01 / 06

Table 2: Distribution/locations of premises to be built/rehabilitated in the project area

Provinces	Municipalities	Offices		Residential houses	
		Rehabilitation	Construction	Construction	Rehabilitation
Bengo	Dande		1	1	
	Dembos	1		1	
	Nambuangongo	1			1
	PangoAliquèm	1		1	
Cuanza Norte	Ambaca		1		1
	Cazengo		1	1	
	Lucala		1		1
	Samba Cajú		1		1
	Cambambe		1	1	
Uige	Alto Cauale		1		1
	Bungo	1		1	
	Damba		1		1
	Dange-Quitexe	1		1	
	Maquela do Zumbo		1	1	
	Negage				
	S. Pombo		1		1
Zaire	Mb Congo		1	1	
	Kuimba	1		1	
	Tômboco	1		1	
	Noqui	1		1	
Total North		**8**	**11**	**12**	**7**
Benguela	Ganda		1		1
	Cubal		1		1
	Chongoroi		1		1
	Balombo		1		1
Cunene	Ombadja	1		1	
	Cuvelai	1		1	
	Cahama	1		1	
	Curoca	1		1	
Namibe	Bibala		1	1	
	Camucuio	1		1	
	Moçâmedes	1		1	
	Virei	1		1	
	Tômbua	1		1	
Total South		**8**	**5**	**9**	**4**

Appendix 16: Contents of the Project Life File

A.PRIOR DOCUMENTS

- Country Strategic Note;
- SREP Concept Note;
- SREP OSC Issues Paper
- SREP OSC minutes
- SREP CPMT minutes
- Design mission TORs for SREP
- Agricultural Recovery Project (ARP) PDR;
- Smallholder Agriculture Development and Commercialisation Project in Cuanza Sul and Huila Provinces (SADCP-C&H) PDR;
- IFAD Guidelines for Disaster Early Recovery;
- Angola Country Strategy and Programme Evaluation (CSPE)

B. **SREP PDR Appendices**

C. Additional Reports

Environmental and Social Management Plan

Task Force (in-Country)

- To be established at negotiations

CPMT Members (in-house)

Rikke Olivera (Lead Advisor); Abla Benhammouche (Country Director); Paxina Chileshe (ECD); Robert Creswell (FMD); Karen Gumbo (FMD/Intern); Richard Abila (PTA); Stephen Twomlow (ECD); Marian Odenigbo (OPE); Bernadette Mukonyora (ESA); Joash Moitui (ESA Intern); Francesca Tarabella (Programme Assistant); Robert Delve (PTA).

Design Team

The project first design Mission composition: Abla Benhammouche; Ms. Rikke Olivera; Mr. David Kahan; Ms. Paxina Chileshe; Ms. Marian Odenigbo; Mr. Jonathan Agwe; Mr. Davis Atugonza; Mr. Alaudio Chingotuane; Mr. Antonio Abreu; Ms. Maureen Bessem

Final Design Mission Composition:
Abla Benhammouche; Mr. David Kahan; Mr. Davis Atugonza; Mr. Antonio Abreu; Mr. Guy Kemtsop Mr. Custodio Mucavele.

Project development timeline for SREP

- Submit to IDA and Pre-QE CPMT to review SREP design document (PDR) by 05/2018
- Review of draft SREP PDR by IDA and CPMT by 05/2018
- Send to IFAD QE Secretariat by 05/2018
- QE Meetings by 06/2018
- Final design mission by 07/2018
- IFAD Senior Management QA by 09/2018
- SREP Negotiations by 02/2019
- Submission of SREP to IFAD Executive Board by 04/2019
- SREP Financing Agreement Signing and Implementation Start by 05/2019